Vol. X. No. 8 FULL DESCRIPTION OF THE 2.8 LITRE BUGATTI. *June, 1934*

MOTOR SPORT

LAND - AIR - WATER

SIXPENCE MONTHLY



"ROAD RACING" AT BROOKLANDS. [*Motor Sport Photograph*

The Hon. Brian Lewis swings his Maserati round the Fork Corner during the J.C.C. International Trophy.

R.I.B.

Proved again!

FERODO BRAKE LININGS WERE FITTED TO THE SUCCESSFUL CARS

JUNIOR CAR CLUB RACE
BROOKLANDS, APRIL 28TH
1st Whitney Straight (MASERATI)
3rd T.E. Rose Richards (BUGATTI)
4th Cyril Paul (RILEY)
15 out of 17 finishers used
FERODO BRAKE LININGS

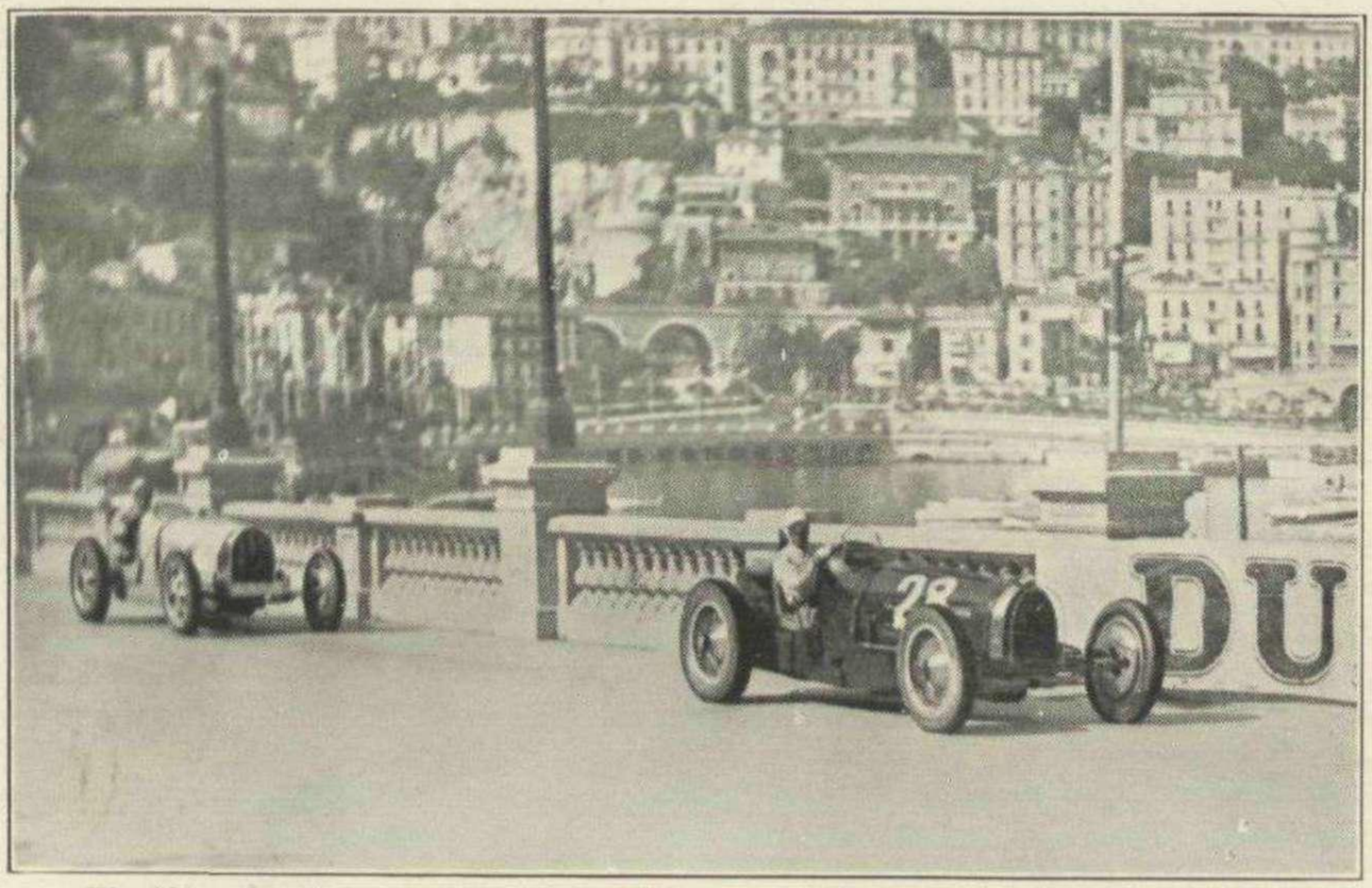
★ Efficient brakes — vital to safe speed — are vital to *your* motoring safety and enjoyment.
Specify FERODO Brake Linings and get the 3-Point Guarantee.

REGD. TRADE MARK FERODO BRAKE LININGS

FERODO LIMITED CHAPEL-EN-LE-FRITH

MOTOR SPORT PHOTOGRAPHS

THE MONACO GRAND PRIX, 1934



The Old and the New. Nuvolari on one of the latest 2.8 Bugattis passes Veyron on a "2.3."

PRICES for "Motor Sport" Photographs are as follows:—

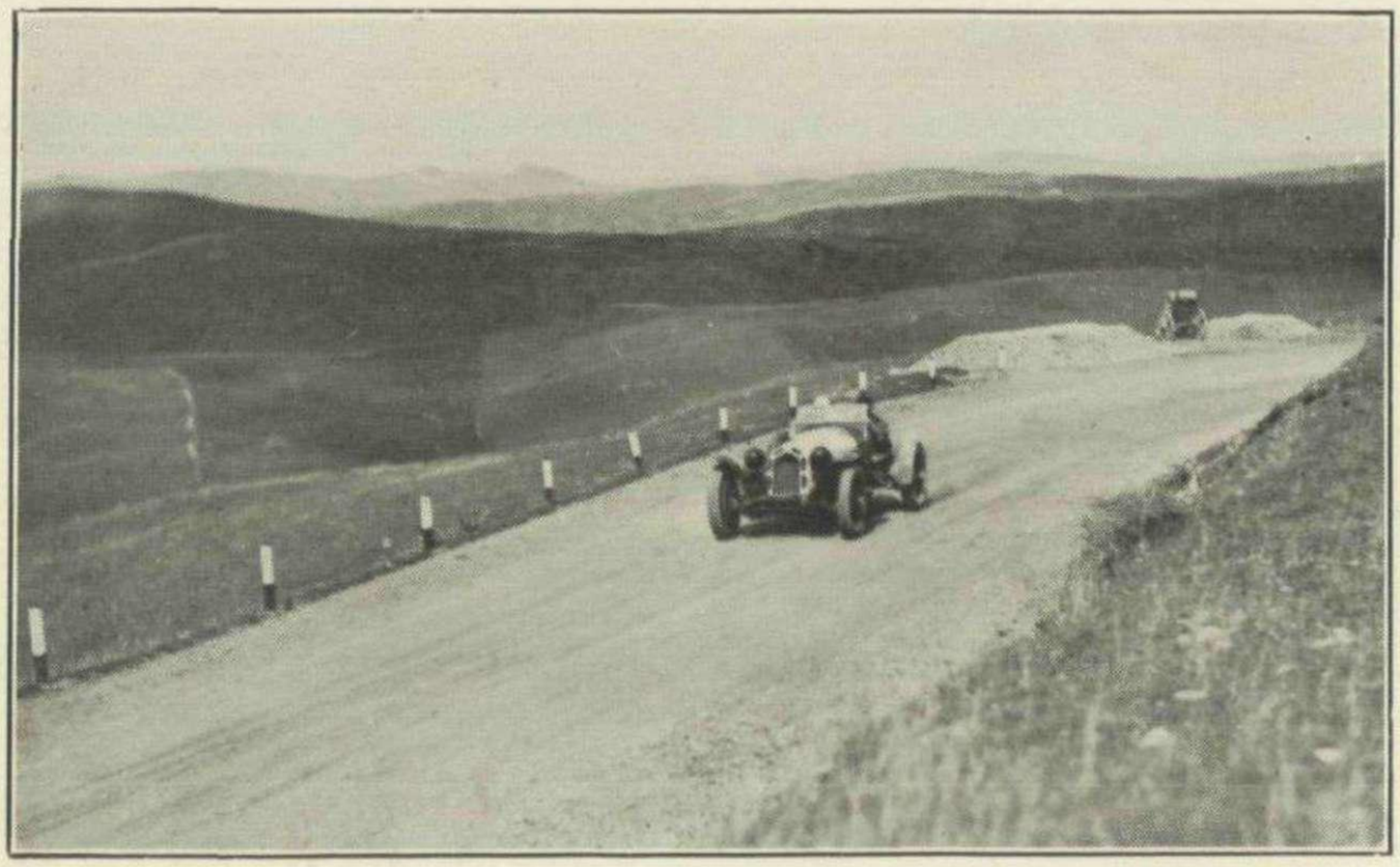
8" × 6" - - **2/-**

10" × 8" - - **3/-**

CASH WITH ORDER.

PRINTS are available of all Photographs Published, also many others taken at the various meetings.

THE MILLE MIGLIA



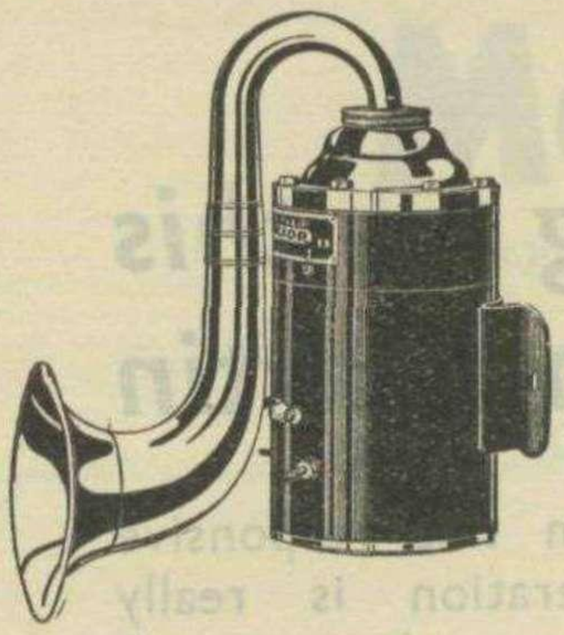
Ruesch, the Swiss driver, corners at speed. The broken nature of the country can be appreciated.

MOTOR SPORT (1929) LTD., 39, VICTORIA STREET, LONDON, S.W. 1.

"MARCHAL"

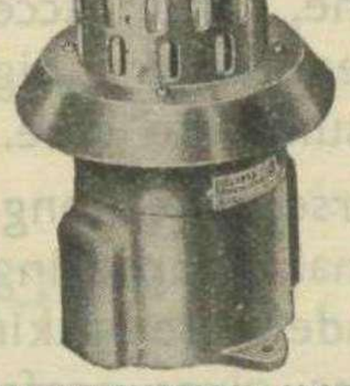
Depot for

WARNING SIGNALS



The "IMPERIOR" —vertical or horizontal models. A rotary three-blade blower, actuated by an electric motor of high efficiency with a minimum of inertia. The sound emitted has a "**crescendo,**" controlled by the push button switch, from a town tune to a full blast warning heard for over a mile radius — a note which compels attention without irritation. As used on **Public Services** vehicles abroad. **£12-18-0**



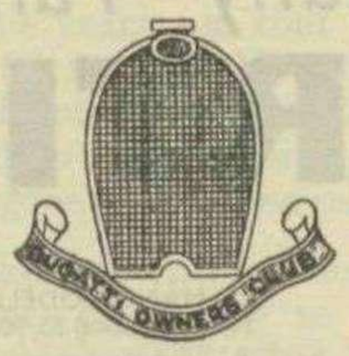


"MONO-SYREN," £3-10-0 **"DUPLO-SYREN," £4-4-0**

The multiple blade impellers and the motor armatures are of special design with a minimum of inertia. An efficacious warning suitable for all road conditions without reaching the objectionably high pitch of some foreign signals. *Lists from :*

C. DESIDERIO, 143, Whitfield Street, London, W.1

Manchester Depot—Burdett Bros., Deansgate, Manchester.



The BUGATTI OWNERS CLUB

LTD.

A GENUINE NON-TRADE CLUB RUN

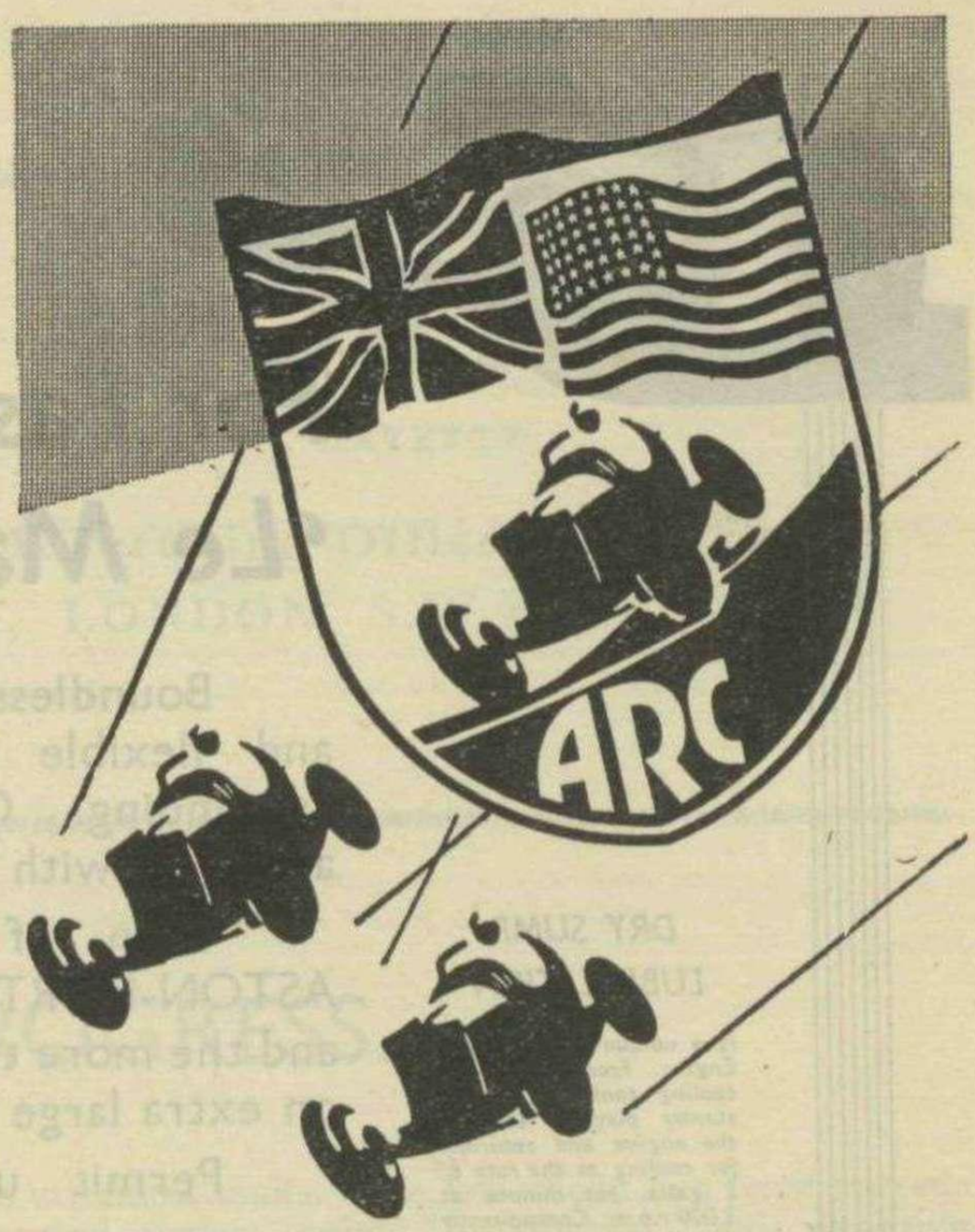
BY AMATEURS FOR AMATEURS.

THE CLUB MAGAZINE "BUGANTICS" IS SENT TO ALL MEMBERS BI-MONTHLY.

FULL PARTICULARS FROM

E. L. GILES, Hon. Secretary,

2, QUEEN STREET, MAYFAIR, W.1



AUTODROME RACING CLUB

MEMBERSHIP:

Racing - - - £2 2 0
Associate - - £1 1 0

Supporters' Club being formed.

TECHNICAL ADVISER:
Alvin "Spike" Rhiando.

THE GREATEST THRILL OF YOUR LIFE!!

Dirt track racing in real American style at

GREENFORD TRACK

(Near Western Avenue)

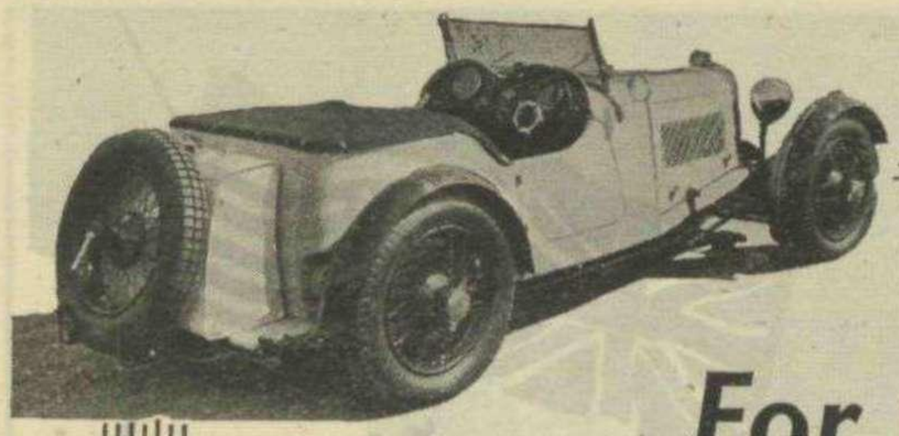
ADMISSION 1/6, 2/6 & 5/-

Frequent trains from Paddington to Greenford. Fare 9d. return. Bus route, Wood Land - Western Avenue.

RACING EVERY SATURDAY

Write Secretary C.

AUTODROME RACING CLUB, 54, WARREN ST. LONDON, W.1. TELEPHONE: MUSEUM, 3368.



ASTON-MARTIN

For Fast Cruising try this 'Le Mans' Aston-Martin

Boundless power flows from this responsive and flexible engine, and acceleration is really astounding. Consequently a high speed average is achieved with consummate ease.

Then, of course, the long low build of an ASTON-MARTIN make cornering both fast and safe, and the more than adequate braking system, operating on extra large drums, gives perfect control.

Permit us to arrange a trial run for you.

DRY SUMP LUBRICATION

is a unique feature of the Engine. From the 2½ gal. cooling tank oil is constantly pumped through the engine and returned for cooling at the rate of 2 galls. per minute at 3,000 r.p.m. Consequently the oil temperature cannot rise above 75° C., even under racing conditions.

ASTON-MARTIN LTD., Feltham, Middlesex

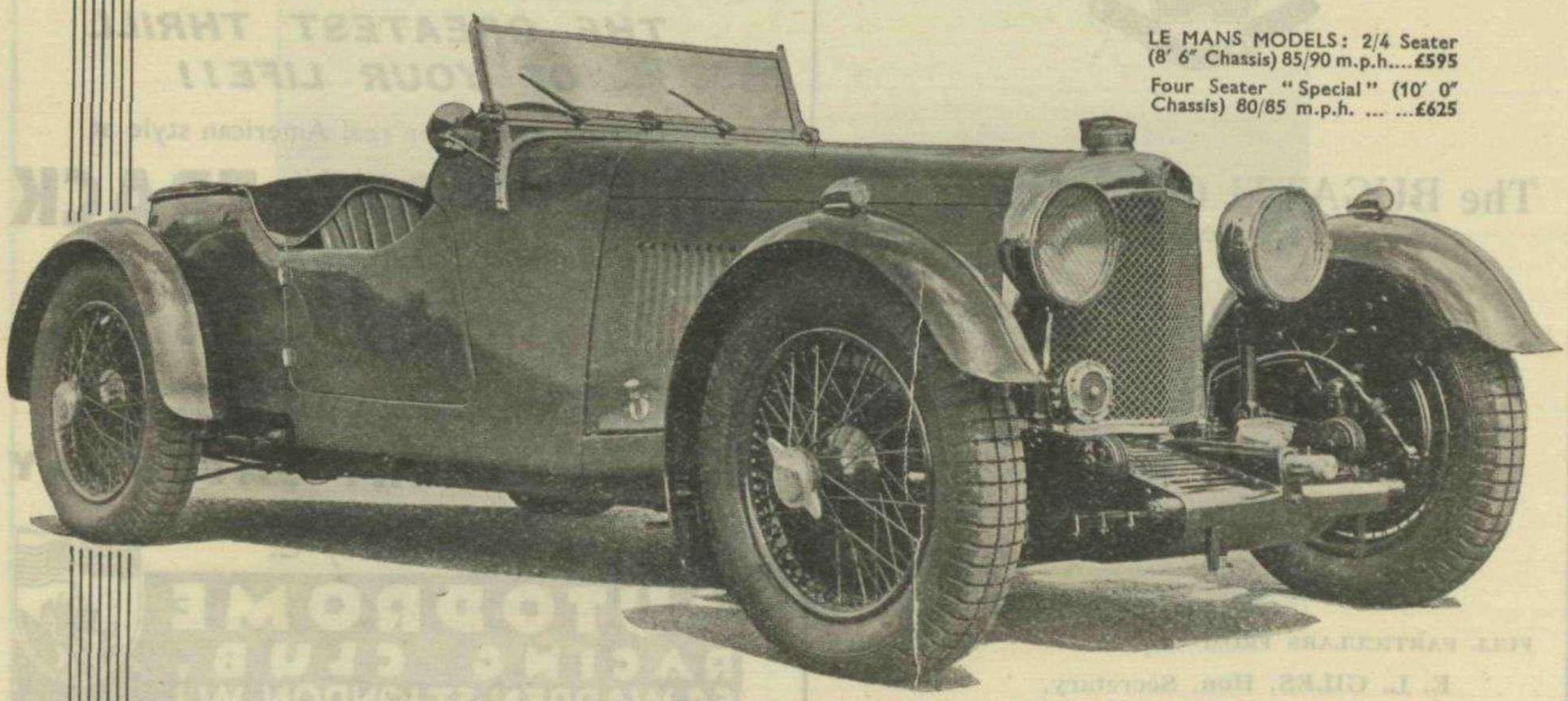
Telephone: Feltham 218-9

The British and Internationally Famous

ASTON-MARTIN

LE MANS MODELS: 2/4 Seater (8' 6" Chassis) 85/90 m.p.h....£595

Four Seater "Special" (10' 0" Chassis) 80/85 m.p.h. £625



VOL. X. NO. 8. JUNE 1ST, 1934. PRICE SIXPENCE
SUBSCRIPTION RATE
7/6 PER ANN. POST PAID

MOTOR SPORT

INCORPORATING THE BROOKLANDS GAZETTE

Editorial, Publishing & Advertising Offices
39, VICTORIA STREET, LONDON, S.W.1

Telephone: Victoria 5218.

THIS IS PROGRESS.

IT is an interesting speculation as to where progress in regard to speed will finally lead us. A few years ago the world's fastest land speed was 170 mp.h., attained by cars of colossal engine-size which were totally unsuited to road-work. The 1934 Grand Prix cars can attain this speed as a matter of course in a race like the Tripoli G.P.

It is less than five years ago that the 750 c.c. speed record was about 90 m.p.h. Nowadays this speed is within the reach of the owner of a 750 c.c. sports car which can be tuned to the requisite pitch of efficiency, and the record has gone up to close on 130 m.p.h.

Where is it all likely to end? One things is certain; speeds will increase. It is easy to think, after some particularly fine achievement, that a limit has been reached in design and human ingenuity, but records are made to be broken.

Sir Malcolm Campbell is already planning an attempt on his own 272 m.p.h. world's record, and one cannot conceive of his returning from America without having exceeded this figure. Yet when he did 272 m.p.h. at Daytona last year, one instinctively felt that land speed could not go higher.

In the matter of road racing cars the problem is a more complicated one, for more factors have to be taken into consideration. Cars cannot be above a certain weight, so that power-development has to be carried to its uttermost limits. The low weight and terrific speeds demand perfect weight distribution, and cornering attributes must be studied closely. Then brakes are subject to far higher stresses than ever before. and here again, weight distribution plays its part, as it also does in regard to steering.

Finally tyres. For straightaway records the problem, although extremely intricate, is free from the complications of braking and cornering stresses, but it looks as though the 180 m.p.h. road racing car will prove a difficult task for tyre designers. But so often have they overcome their jobs in the past that they will inevitably triumph over this new one.

The effect of all this on private cars is evident to anyone studying modern automobiles. Engines are faster and more reliable, brakes are better, streamlining is being carried out, principally in Germany and the U.S.A.

What will the racing car of the future be like? For touring car design follows in many respects. Of 1934 examples the Auto Union is the most revolutionary, with its engine at the rear and independent springing. But for cornering abilities on a winding circuit it has yet to be proved, although for speed it is certainly not lacking.

For a real comparison of progress, compare the Auto Union of 1934 with the land speed record holders of ten years ago.

CONTENTS

	PAGE
This is Progress	339
Records Fall at Brooklands	340
Rumblings	345
Second Donington Meeting, The	349
Tripoli Grand Prix at 116 m.p.h.	352
Whitney Straight wins the International Trophy	353
A Sports Car of Character	357
Foreign Touring	359
Enthusiast's Ideal, The	362
16-66 A.C., The	365
Singer "Eleven," The	368
Famous Racing Cars—The 2.8 Bugatti	369
News from the U.S.A.	372
Club News	373
1st E.R.A. Racing Cars Complete, The	377
Continental Notes and News	380

RECORDS FALL AT BROOKLANDS

EARL HOWE (BUGATTI) AND R. T. HORTON (M.G. MAGNETTE) RAISE FIGURES FOR MAIN CIRCUIT, WHILE SIR M. CAMPBELL (SUNBEAM), RAYMOND MAYS (RILEY), C. S. STANILAND (BUGATTI) AND L. P. DRISCOLL (AUSTIN) ALL BEAT MOUNTAIN CIRCUIT RECORDS.

NOT since Class records for the Main and Mountain Circuits at Brooklands were instituted have so many records fallen by the board as occurred at the Meeting on Whit-Monday. Six records were broken, and two of these were bettered during the afternoon, so that eight new records in all were set up. We will deal with them individually in the course of the reports of the races.

The most notable non-starter of the day was the Jameson Special, which Sir Malcolm Campbell was down to drive. This car has failed to turn up so many times now that when it finally makes its first racing appearance at Brooklands people will hardly believe their eyes. From the personal point of view the most regretted absentee was T. A. S. O. Mathieson. As everyone knows, Mathieson has been seriously ill and has just returned from a convalescent cruise to the West Indies. Unfortunately his health is still not as good as it might be, and for this reason he has decided not to race at all this season. For a man who has just taken delivery of a "works" 2.3-litre Bugatti, such a decision must have been heart-breaking. Rather than waste his entries on Whit-Monday, Mathieson handed over his car to that fine driver C. S. Staniland, who is seen much too seldom at the wheel nowadays.

The first race nearly resulted in one of the easiest walk-overs ever seen at the Track. N. S. Embiricos was on the 3 seconds mark with a Type 55 Bugatti (twin camshaft 2.3-litre), starting level with D. A. Aldington's un-supercharged Frazer Nash. On the Byfleet Banking on the first lap Embiricos caught the whole field, and came past the Members' Bridge with a long lead from A. H. Robins (M.G. Magna), W. E. Humphreys (Alvis), F. Allen (M.G. Midget), D. A. Aldington (Frazer Nash), R. F. Oats (Amilcar), C. G. H. Dunham (Alvis) and J. R. Hodge (Singer). Robins's car, by the way, is now fitted with a grey streamlined body and cowled radiator. E. L. Meeson (Hillman) and C. D. Parish (Austin) had both retired on the first lap.

The race, then, looked an easy thing for Embiricos—barring trouble, and this is what actually happened. As he came off the Byfleet Banking the engine faltered, spluttered and stopped. His momentum carried him to the Home Banking, and there he stayed while the rest of the cars swept by, D. A. Aldington (Frazer Nash) leading. In the end the Frazer Nash won at the fine speed of 93.69 m.p.h., Fred Allen bringing his Midget into second place some 50 yards astern. W. E. Humphreys, driving Charles Follett's "Firefly" Alvis was third.

Result of Merrow Junior Short Handicap.

1. D. A. Aldington (Frazer Nash, 1,496 c.c.), 3s.
2. F. Allen (M.G., 747 c.c. S.), 14s.
3. W. E. Humphreys (Alvis, 1,496 c.c.), 25s.

Won by 50 yards at 93.69 m.p.h. 125 yards between second and third.

Considerable disappointment was felt when it was announced that Sir Malcolm Campbell was a non-starter on the Jameson Special. However, a goodly number of fairly fast cars assembled on the line, ranging from R. Morgan (Singer), the limit man, to C. S. Staniland (2-litre Bugatti) on scratch. At the end of the first lap the leader was C. E. C. Martin on the 6-carburetter M.G. Magna owned by Roy Eccles. He was followed by Miss Rita Don, driving C. T. Delaney's Lea Francis, H. G. Dobbs (Riley), F. Allen (M.G. Midget), then E. K. Rayson (Riley) and Mrs. K. Petre (Bugatti) running neck and neck, Miss Ellison (Bugatti), who turned in at the Fork to retire, T. V. G. Elby (Bugatti), C. T. Osborne (Austin), S. Staniland (Bugatti) and F. J. Fielding (Bugatti). Fielding's car attracted a good deal of attention in the Paddock on account of its beautiful finish, but it was not in its Shelsley-form during this race.

Mrs. Petre got clear of Rayson, whose Riley was making a thunderous roar owing to one of its exhaust pipes coming adrift from the silencer. She held steadily on her path and was soon passing Allen, Martin and Rita Don, completing the job in time to win by a margin of 10 yards at the excellent speed of 100.04 m.p.h. Staniland just failed to catch Mrs. Petre, in spite of passing four cars on the short run along the Railway Straight, and his second place was thoroughly deserved. Immediately behind him came a squabbling mass of cars, from which Rayson emerged to take third place in the best finish of the day.

Result of Merrow Senior Short Handicap.

1. Mrs. K. Petre (Bugatti, 1,990 c.c.), 23s.
2. C. S. Staniland (Bugatti, 1,990 c.c. S.), scratch.
3. E. K. Rayson (Riley, 1,089 c.c. S.).

Won by 10 yards at 100.04 m.p.h., 20 yards between second and third.

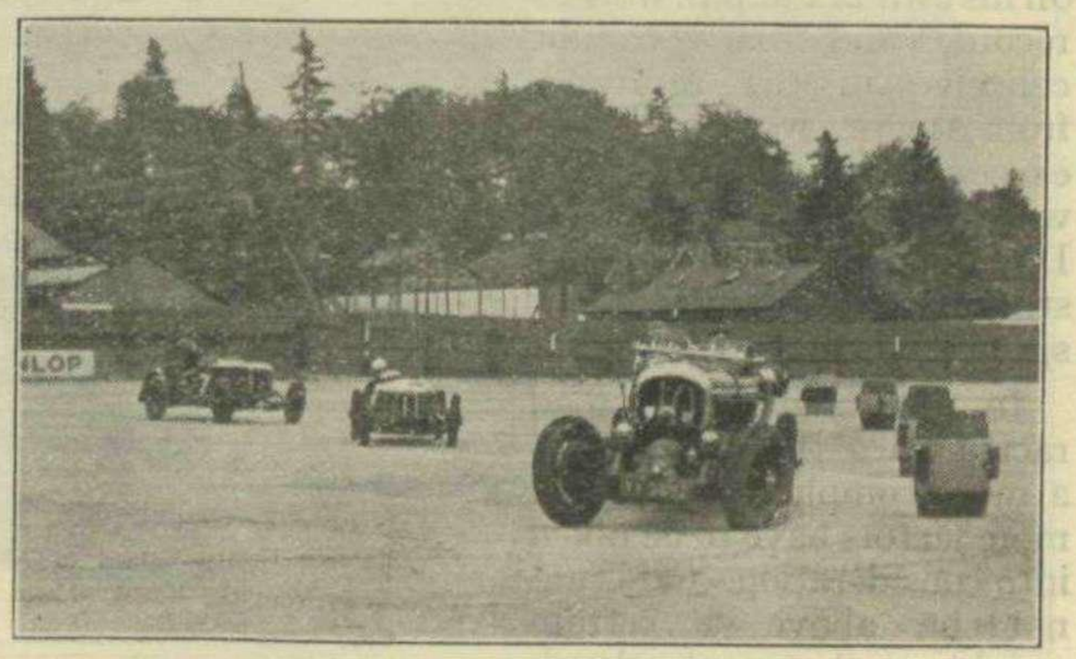
Twelve cars came to the line for the first Mountain race of the Meeting. V. S. Gilbert (Austin) was the limit man, and he led the field for three laps by an exhibition of smooth, fast cornering. Behind him thundered Dr. R. A. Beaver on a 30/98 Vauxhall which he has entered for every meeting this year at Brooklands but was now driving at the Track for the first time. He handled his "30/98" with exceptional skill, sliding round the Fork in a most polished fashion. Another driver who was making a good job of a car not entirely suited to the circuit was W. Esplen, with a vast 4½-litre Bentley. The front tyres of this car nearly came off as it heeled over like a battleship in a gale, and they set up a howl in a lower key than has yet been heard at the Fork.

By the time the third lap had been covered A. J. Cormack had worked his way into third place from scratch with his green Alta, having passed C. T. Baker-Carr (Bentley), D. L. Briault (Alta), C. M. Lewin (Austin), H. F. Benka (Invicta), Sqd. Ldr. Bowen-Buscarlet (Riley), J. H. Potts (M.G. Midget) and N. A. Pinegar (M.G. Midget). The other scratch men, H. G. Dobbs (Riley) and W. Esplen (Bentley) could not hold the little Alta, which proceeded to overhaul Gilbert on the 4th lap and Beaver on the last to gain a most meritorious victory.

On the last lap C. M. Lewin (Austin) nearly failed to round the Fork Corner



Bunching at the Fork. H. L. Maddick (M.G. Magna) and T. P. Cholmondeley-Tapper (Bugatti), lead a group of cars in the last race of the day.



W. Esplen cornered fiercely on his big 4-litre Bentley, nearly removing his tyres in the process.

WITH OUR APOLOGIES!

It has occurred to us at different times that it might be a good idea to reprint extracts from the considerable number of enthusiastic letters received from our owners. There is nothing novel about the idea—testimonials are, in fact, probably the oldest idea in advertising. We have refrained from doing so because, for one thing, it seems rather like beating our own drum, while again " unsolicited testimonials " are usually viewed with mistrust—sometimes with good reason. We think, however, the extracts themselves will convince readers of their genuineness and spontaneity—apart from the inclusion of the stock phrase that " the originals may be inspected at any time." It is obviously impossible to print more than a few extracts here, and because of this it has been difficult to make a choice from so many equally enthusiastic letters.

Our apologies are due for thrusting our owners' opinions at you, but quite obviously they have no axe to grind, and can, therefore, be relied upon.

" The Frazer Nash is certainly all you claim it is—I have run the car 1,700 miles since delivery, and may I say they have been the most pleasant I have ever had with a car."

Nottingham.

" I can honestly think of no words to convey my praise of the car—the performance is perfectly amazing, and the thing which strikes one immediately is the extremely fine way it is finished. Thank you again for turning out such a fine job."

Lieut., R.N., Portsmouth.

" For use in competitions, the Frazer Nash needs no testimonials and one from me would be of no value for I am a doctor, getting elderly, who uses the car regularly in his work and for long journeys. As to reliability and wearing qualities I can only say that the car was delivered in January, 1925; has never given any trouble or required any serious repair, and that it is now in all real essentials as good as new.

" As to its actual qualities to drive on the road, I can best praise them by the fact that I also own a well-behaved large six-cylinder car, but definitely enjoy driving the Frazer Nash more.

" The second feature of the car is its extremely good road-holding and stability.

" The third feature is the steering—a very important one, I think, as steering is a weak point in most modern cars. The high-geared, dead accurate steering on my Frazer Nash is a delight, and, after all, one is always steering!

" To sum up my impressions—the Frazer Nash is not only a very good car but one of unique character."

Dover.

" Thank you for so promptly sending the gasket, and for your letters answering my various queries. It is certainly a pleasure to deal with your Service Department, especially after my experiences with other manufacturers."

Birmingham.

" I must say that I have never gained so much confidence in a new car as I gained in the Nash in the first five miles."

Eastbourne.

" The way in which the car stands up to fast work day in and day out in all weathers is a tribute to the huge margin of safety which is built into your cars. On Saturday I returned from Birmingham in so short a time that it seems impossible. While going up early in the morning I encountered many miles of iced roads, and the car was rock steady although travelling much faster than other cars."

Middlesex.

" I will take this opportunity to thank you for all the trouble your firm have taken to get the car exactly to my liking, and I have felt at times that I was asking you too much. However, the excellent service you have given me has been thoroughly appreciated, and the charges have been most reasonable."

London.

" I would like to thank you for your congratulations on the Land's End. I am certainly getting great fun out of owning a Nash, and get more sport out of driving one than any car I have had before."

Blackburn.

" The new Nash is magnificent, and far exceeds my already great expectations. The steering is delightful while the lights are the best I have ever seen. Your interpretation of the specification is most generous—many thanks. Please convey my best thanks to all concerned in building the car."

Devonport.

" The promptitude with which you have dealt with my requests for information and the one or two things I have required recently has given me great satisfaction and is a credit to all responsible at your Works, and in keeping with the splendid reputation and performance of Frazer Nash cars."

Sheffield.

FRAZER NASH CARS · ISLEWORTH
MIDDLESEX · HOUNSLOW 0011 & 0012

RECORDS FALL AT BROOKLANDS—continued.

and Esplen gave the inside sand bank a good buffet with his Bentley. N. A. Pinegar caused a burst of laughter when his white M.G. Midget developed a teriffic wheel judder at quite a low speed, causing him almost to come to a standstill.

Result of First Merrow Mountain Handicap.

1. A. J. Cormack (Alta, 1,074 c.c. S.), scratch.
2. Dr. R. A. Beaver (Vauxhall, 4,234 c.c.), 20s.
3. C. T. Baker-Carr (Bentley, 4,487 c.c.), 5s.

Won by 150 yards at 66.02 m.p.h., 70 yards between second and third.

The second Mountain Race marked the return of Sir Malcolm Campbell to this form of racing after the Mountain Championship last year, when his 12-cylinder Sunbeam was damaged in a collision with Rose-Richard's Bugatti. From the start the interest of the race lay in the fight between Campbell and Raymond Mays, on his "special" Riley, both starting from the scratch mark. For two laps Mays held a slight advantage, but then Campbell got by at the Fork.

Ahead of these two, W. E. Harker had got his Harker Special running in wonderful form, and by the third lap he had taken the lead after passing R. H. Eccles (Frazer Nash), A. R. Samuel (M.G. Midget), W. Esplen (Bentley), J. H. Day (M.G. Midget), R. C. Vickers (Lea Francis), P. G. Fairfield (Riley) and the limit man N. A. Pinegar (M.G. Midget).

The duel between Campbell and Mays continued, and both of them beat the existing lap records for their respective classes. Campbell did a lap in 55.2 seconds at 76.31 m.p.h., beating G. E. T. Eyston's 55.4 seconds with the 4.9 Bugatti. Mays improved on his own record of 56.4 seconds, covering a lap in 56 seconds dead at 75.21 m.p.h. C. S. Staniland had started 9 seconds ahead of the scratch pair, and was picking up places on every lap. Then he too joined the ranks of the record breakers with a lap in 58 seconds, or 72.62 m.p.h., two-fifths of a second better than Mathieson's previous record made with the same car.

On the last lap Campbell and Mays came through to take 2nd and 3rd places respectively, failing to catch Harker by 150 yards. At the Fork Corner P. A. Fairfield skidded round in a circle, but fortunately no one was very near. Pinegar repeated his curious wheel-juddering performance.

Result of Second Merrow Mountain Handicap.

1. W. E. Harker (Harker Special, 1.492 c.c. S.), 31s.
2. Sir M. Campbell (Sunbeam, 3,976 c.c. S.), scratch.
3. R. Mays (Riley, 1,486 c.c. S.), scratch.

Won by 150 yards at 67.50 m.p.h., 30 yards between second and third.

There were no non-starters nor re-handicaps in the Fifth Race, which was run according to programme. Major A. T. G. Gardiner was limit man, at the wheel of a racing car for the first time since his bad accident in the T.T. of 1932. His beautifully finished green Magnette had a start of 23 seconds, but on the first lap he was passed by C. R. A. Grant on the 4-seater Alfa Romeo once owned by Sir Malcolm Campbell and R. T. Horton, whose streamlined Magnette was travelling at a colossal speed.

Horton continued his meteoric progress, and on the second lap returned a speed of 120.59 m.p.h., a new 1,100 c.c. class record. His red Magnette was remarkably silent, and held the track better than most cars of twice its size. A. H. L. Eccles was going very fast from the scratch mark, and was lying fourth on the second lap behind Grant, Horton and Gardner. For once Freddie Dixon was out of the picture, but he moved up among the leaders on the last lap and got ahead of Grant, only to be passed again on the run-in from the Members' Banking. Horton was an easy winner, taking his foot off as he entered the Railway Straight to win by 300 yards from Eccles, Grant being third.

Result of Merrow Lightning Short Handicap.

1. R. T. Horton (M.G., 1,087 c.c. S.), 10s.
2. A. H. L. Eccles (Bugatti, 2,263 c.c. S.), Scratch.
3. C. R. A. Grant (Alfa Romeo, 2,336 c.c. S.), 19s.

Won by 300 yards at 110.33 m.p.h., 125 yards between second and third.

Now came the Great Event of the Day, the Gold Star Handicap of 20 Miles. For this there were two non-starters, H. G. Dobbs (Riley) and H. T. H. Clayton (Amilcar), but a field of 15 cars came to the starting line. On the first lap E. K. Rayson (Riley) led, followed by C. R. A. Grant (Alfa Romeo), F. Hallam (Alvis), T. V. G. Selby (Bugatti), A. C. Dobson (on the Bugatti once owned by Charles Brackenbury), G. Shapley (Bugatti), R. R. K. Marker (Bentley), F. W. Dixon (Riley), Earl Howe (Bugatti), R. T. Horton (M.G.), C. S. Staniland (Bugatti), A. H. L. Eccles (Bugatti), and the two scratch men, Kaye Don (Bugatti) and O. J. H. Bertram (Delage).

Earl Howe was a strong favourite for the race, people who "study form" saying that he only needed to lap at 121 m.p.h. in order to win. As it turned out, however, Earl Howe put in some extremely fast laps during this race, on one occasion raising his own Class Record from 125.45 m.p.h. to 129.80 m.p.h. Earl Howe steered a most interesting course on the Members' Banking. We first noticed it on lap 3, when he pulled down the Banking at the beginning of the wooden "retaining-wall" and passed Marker's Bentley and another car on the inside. But this course was also taken when the Track was clear, the Bugatti appearing under the Members' Bridge right at the top of the banking and then diving down to a position which avoided the famous "bump" altogether.

Horton was tremendously fast with his Magnette, and accomplished the finest performance of the day by covering a lap at 123.58 m.p.h. This speed represents a wonderful testimony both to the car and its driver, and we offer our heartiest congratulations to both of them.

On the fifth lap Earl Howe took the lead, and from then on he was not challenged. At this stage the order was Earl Howe, Rayson, Selby, Hallam, Dixon, Marker, Bertram, Eccles and Grant. Two terrific scraps had already resulted in one or other of the opponents retiring. Staniland and Eccles, starting level, had covered four laps with only a few lengths between them, the combined whine of these two Bugattis being most pleasing to the ear. Staniland had the best of it until his car gave out, leaving Eccles to continue alone with slight misfiring developing in his black "Bug." Bertram and Don were the other pair, Don looking as though he would like to pass Bertram on the Byfleet Banking but being unable to overhaul the Delage on the Railway Straight until Bertram pulled down the Members' Banking on the third lap to let him pass. Don did not stay ahead for long, for a tyre tread flew off and struck his bare forearm so that he had a few unpleasant moments before finally bringing his Bugatti to a standstill.

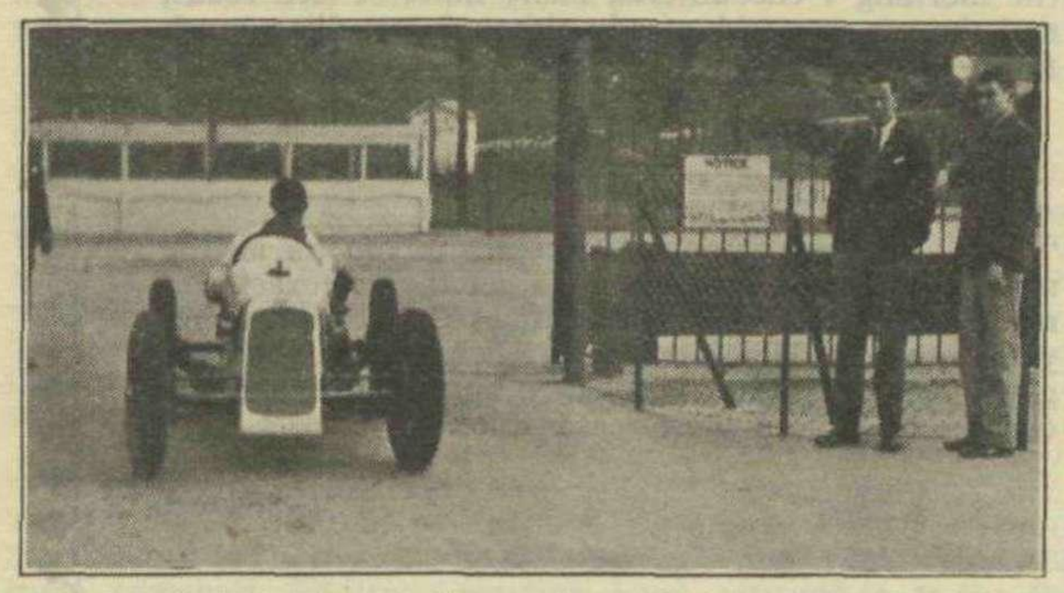
And so Earl Howe came in the winner, 600 yards ahead of Grant's Alfa Romeo, with Bertram doing well to take third place some distance away. Before the race was over Rayson, Shapley, Horton and Hallam had joined the ranks of the retirements.

Result of the "Gold Star" Handicap.

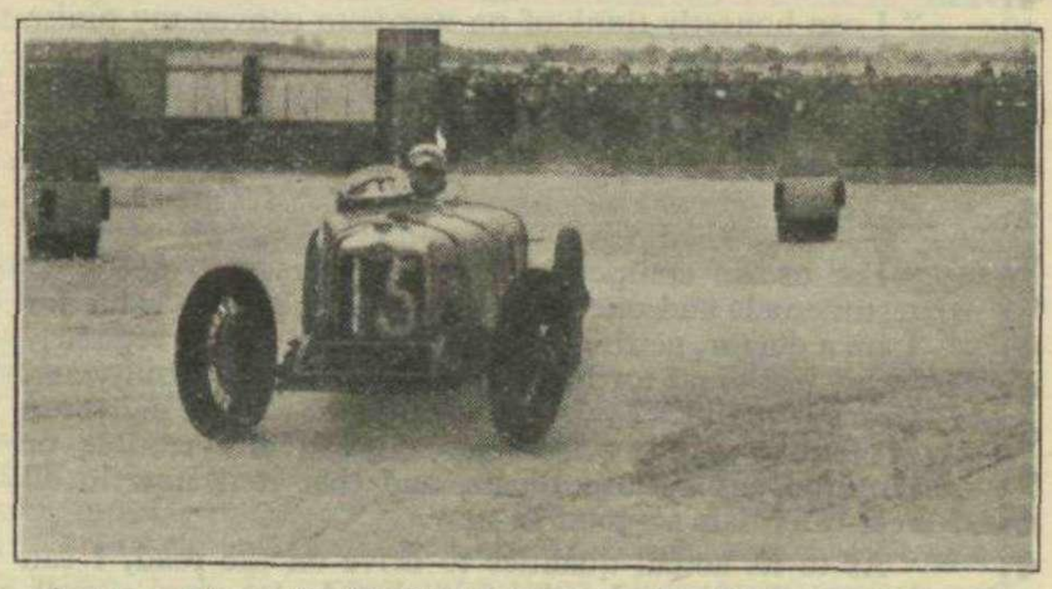
1. Earl Howe (Bugatti, 2,263 c.c. S.) 32s.
2. C. R. A. Grant (Alfa Romeo, 2,336 c.c. S.), 1m. 42s.
3. O. Bertram (Delage, 10,688 c.c.), scratch.

Won by 600 yards at 125.71 m.p.h., 1,300 yards between second and third.

The next race was bound to suffer a good deal by comparison with its



One of the high lights of the meeting was the appearance of the new Mountain-circuit Austin, which broke the 750 c.c. record in the hands of L. P. Driscoll.



A tete-a-queue. P. G. Fairfield turns his Riley round at the Fork and is caught in the act by our camera-man.

RECORDS FALL AT BROOKLANDS—continued.

predecessor, for the speeds were naturally nowhere near so fast. It turned out to be a runaway victory for J. W. Lucas (Riley), one of the limit men, who finished 500 yards ahead of W. L. Thompson, Jun. (Austin). Miss Naismith (Salmson) was in second place for most of the race, and caused a little amusement owing to the fact that her passenger prevented himself from falling out of the car by clasping the driver round the neck.

Although not in the picture for two laps, the scratch man T. V. G. Selby (Bugatti) came up fast just before the finish but failed to catch the leaders.

Result of Merrow Junior Long Handicap.

1. J. W. Lucas (Riley, 1,089 c.c.), 1m. 1s.
2. W. L. Thompson, Jun. (Austin, 747 c.c. S.), 19s.
3. W. E. Humphreys (Alvis, 1,496 c.c.), 49s.

Won by 500 yards at 88.81 m.p.h., 200 yards between second and third.

The second Long Handicap was a much better affair and provided high speeds and a close finish. Clayton was again a non-starter, together with Metcalfe's Abbott-Nash and J. C. Davis, who was down to drive the 8-cylinder 1,500 c.c. Delage, but had damaged his knee-cap.

W. E. Humphreys led the field for two laps on the "Firefly" Alvis, but the back markers were rapidly closing in. Eccles (Bugatti), R. C. Murton-Neale (Bentley), and Bertram (Delage) were all going great guns, but none of them were quite so well placed as A. P. Hamilton on the 2.3-litre Alfa Romeo raced by Kaye Don in the International Trophy. Hamilton started level with Eccles and Murton-Neale but was leading them both. He came through the whole field to take first place on the last lap, only to have his engine give out with victory almost in his grasp. He came under the Members' Bridge coasting, looking back anxiously for the cars behind him. They came in sight only too soon, and in the bunch which swept by Eccles ran out a winner from Murton-Neale and Bertram in one of the closest finishes of the day.

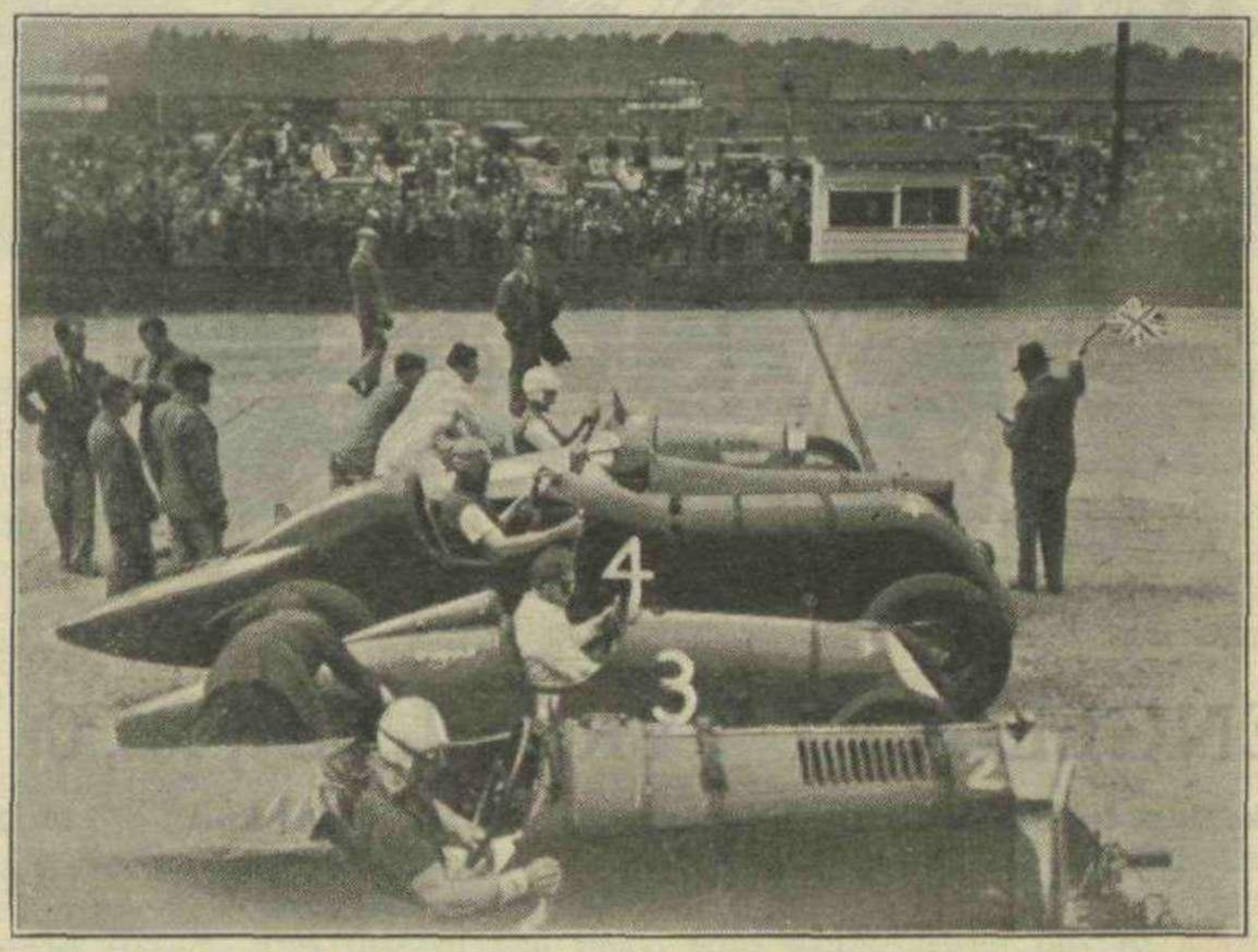
Result of Merrow Senior Long Handicap.

1. A. H. L. Eccles (Bugatti, 2,263 c.c. S.), 24s.
2. R. C. Murton-Neale (Bentley, 4,398 c.c. S.), 24s.
3. O. Bertram (Deleage, 10,688 c.c.), scratch.

Won by 25 yards at 112.28 m.p.h., 10 yards between second and third.

The next race was another "walk-over." N.S. Embiricos was the limit man with his Type 55 Bugatti and merely had to tour round the course in order to win the race. Of the scratch men both Sir Malcolm Campbell and Raymond Mays were rehandicapped, but this time Mays had a 2 seconds start.

The most interesting feature of this race was the first public appearance of a new Austin single-seater, specially constructed for hill-climbs and similar events. It is a most attractive little machine, and in the hand of L. P. Driscoll took the coveted 750 c.c. lap record held by H. C. Hamilton's M.G. Midget. Driscoll's time was 1 min. 0.4 secs., as against the previous figure of 1 min. 0.8 secs.



F. J. Fielding (Bugatti) is seen about to start, while R. T. Horton (M.G.), R. R. K. Marker (Bentley), F. W. Dixon (Riley), and R. C. Murton-Neale (Bentley) await their turn for the flag.

R. H. Eccles held second place for four laps on his Frazer Nash, but was displaced by Staniland and Driscoll on the run-in from the Fork. Mays made great efforts to get up with the leaders, but in spite of again breaking the 1,500 c.c. lap record with a circuit in 55.4 seconds he could not get within striking distance.

Result of Third Merrow Mountain Handicap.

1. N. S. Embiricos (Bugatti, 2,263 c.c. S.), 40s.
2. C. S. Staniland (Bugatti, 2,263 c.c. S.), 4s.
3. L. P. Driscoll (Austin, 747 c.c. S.), 28s.

Won at 66.44 m.p.h. by 75 yards: 12.8 secs. between second and third.

From the point of view of close bunching the last race of the day was quite the best. There were 13 starters, and the whole field clung together in a roaring, jostling mass. On the first lap S. F. Wilson (M.G.) found himself being left behind, and in putting on speed slid right round at the Fork. Luckily he was one but last, and so did not cause any anxiety.

D. M. Dent (Frazer Nash) led for the first lap, only to be passed by Dr. Beaver (Vauxhall), who was driving with great spirit. Meanwhile W. G. Everitt was doing wonders with his extremely fast J. 2. Midget, and had actually passed six cars in two laps. On the next circuit he went into the lead, and from then on was a comfortable winner. D. L. Briault (Alta) retired after a few laps during which his car boiled furiously.

T. P. Cholmondeley-Tapper (Bugatti) worked himself into second place, but some rather violent work on the top corner earned for him a severe reprimand from the Stewards and a fine.

During the Meeting it was announced that the prize for the best turned out *ensemble* of driver and car had been awarded to Earl Howe and his Bugatti.

Result of Fourth Merrow Mountain Handicap.

1. W. G. Everitt (M.G., 747 c.c. S.), 9s.
2. T. P. C. Tapper (Bugatti, 1,496 c.c.), 13s.
3. T. C. Baker-Carr (Bentley, 4,487 c.c.), 9s.

Won by 250 yards at 65.00 m.p.h., 75 yards between second and third.

A few Copies of Back Numbers of

MOTOR SPORT *and* The Brooklands Gazette

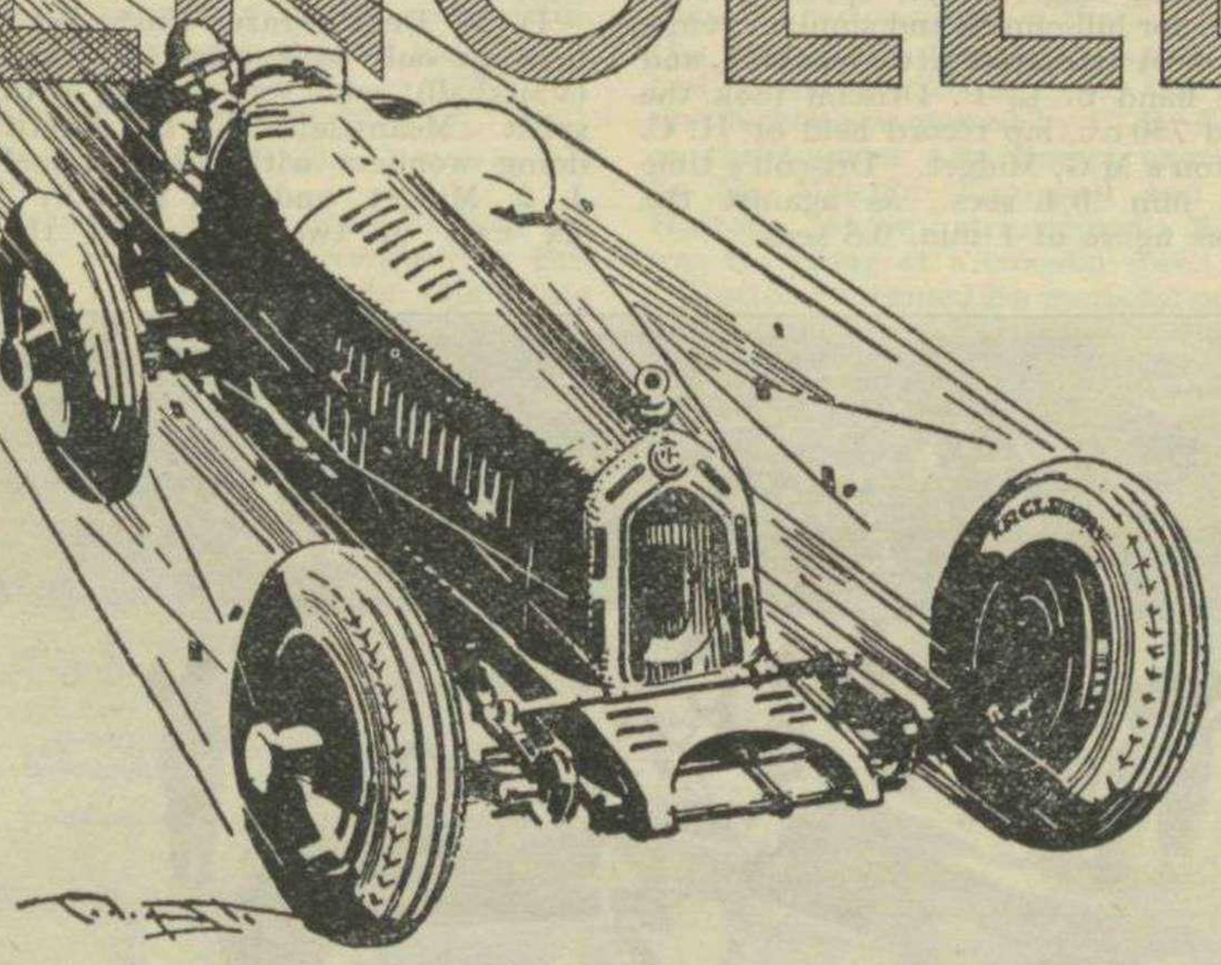
Are still available.

Volume I Nos. 1-12	...	2/- each	Volume IV Nos. 1-12	...	1/- each
,, II Nos. 1-12	...	1/6 ,,	,, V No. 1	...	1/- ,,
,, III Nos. 1-12	...	1/- ,,	,, VI., VII., VIII., IX.		6d. ,,

KINDLY SEND REMITTANCE WITH ORDER TO:— (POSTAGE ON EACH COPY 1½d.)

MOTOR SPORT (1929) LTD., 39, VICTORIA STREET, LONDON, S.W. 1.

ENGLEBERT



CORD TYRES

Latest Success

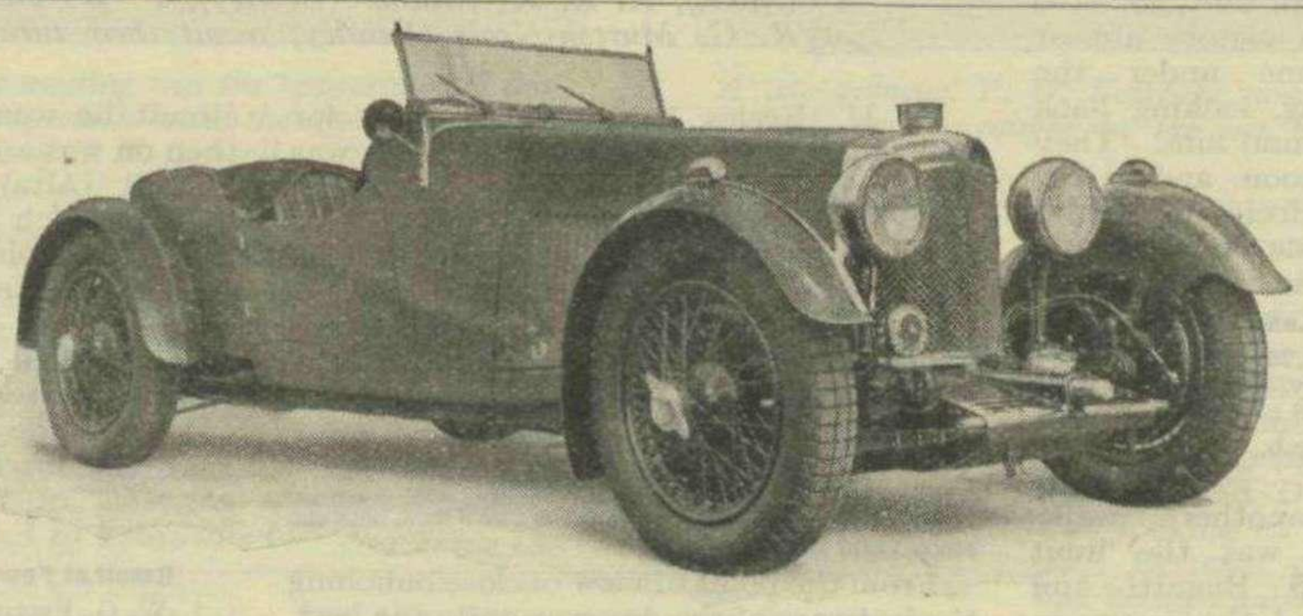
GRAND PRIX de FINLAND
May 14th, 1934

1st BJÖRNSTAD (Alfa-Romeo)
3rd EBB (Mercedes)
both on ENGLEBERT TYRES

SPEED with SAFETY

ENGLEBERT TYRES LTD., 162, Gt. Portland Street, London, W.1

Moon Street, Stokes Croft, BRISTOL.
3a, New Hall Lane, PRESTON, Lancs.
79/83, Downing Street, MANCHESTER.
19a/25, Great Victoria St., BELFAST.
65a, Percy St., NEWCASTLE.
Factories: Liège, Belgium.



All sports car enthusiasts are invited to call on us at our new premises, and will receive a warm welcome. We are specialists in Motor Sport in all its aspects, and are fully equipped for undertaking any type of tuning.

The Directors, having considerable experience in the competition world, can give expert advice on all matters appertaining to sports cars, and can help enthusiasts in choosing the most suitable car for their requirements.

Official stocking agents for:—
ARMSTRONG-SIDDELEY, AUSTIN and M.G. CARS.

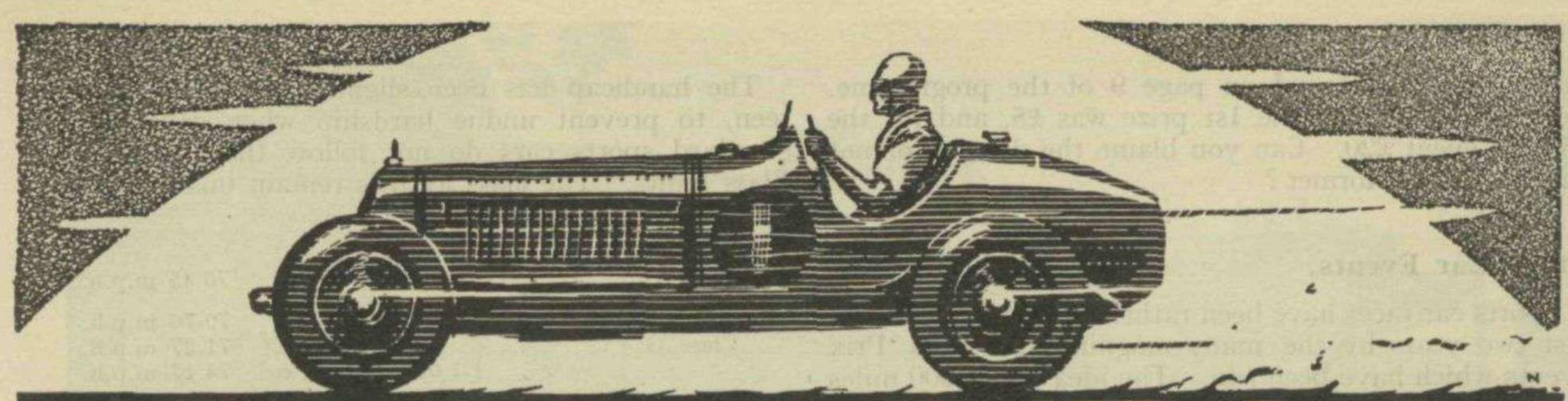
Distributors for **ASTON MARTINS.**

CRESTA MOTOR COMPANY LIMITED

Telephone: WORTHING 2585.

BROADWATER ROAD :: WORTHING.

Directors:
A. N. L. MACLACHLAN.
J. C. ELWES.
R. C. ELWES.



RUMBLINGS

Hard of Hearing.

A STUDY of pit-work during the International Trophy reminded me of a point which I have often noticed in this important aspect of motor-racing. This is what happens. A car comes in to refuel, and immediately it comes to a standstill three mechanics leap down and start work. Now by the rules of the race only three people are allowed on the track, and the driver must accordingly get into the pit. Several times at Brooklands I saw drivers remaining in their seats, while their pit managers shouted to them—"Get out of the car, old man!" Still the drivers sat there, in spite of stronger orders from the pit. Then I suddenly realised that they could not hear a word, being deafened by the roar of the engine and their ears being tightly closed by a thick helmet.

The position is a difficult one, for eagle-eyed marshals refuse to let the third mechanic start work until the driver is out of the car. Meanwhile the seconds tick by, and the pit manager is roused to desperation, bellowing —"Get out of the car, blast you!"

The only way to avoid this contretemps is for the driver always to leave the cockpit.

Built to Last.

One of the interesting things about the race was the re-appearance of a number of two-litre unsupercharged Bugattis. The one owned by Selby, which first saw the light of day in 1926, had been running until last year without ever giving trouble. Selby took it over to Molsheim last autumn believing that such luck was too good to last, and was rewarded by a no-trouble run at over 78 m.p.h. over the 230 miles of the International Trophy. Later on in the month he went up to Southport where frequently he has driven the car, and secured first place in the 50 miles Race.

The two-litre driven by Esson-Scott belonged to the late Count Czaikowski, but the blower has since been removed. Esson-Scott finished 12th at an average speed of 81.77 m.p.h.

Sharpening the Rapier.

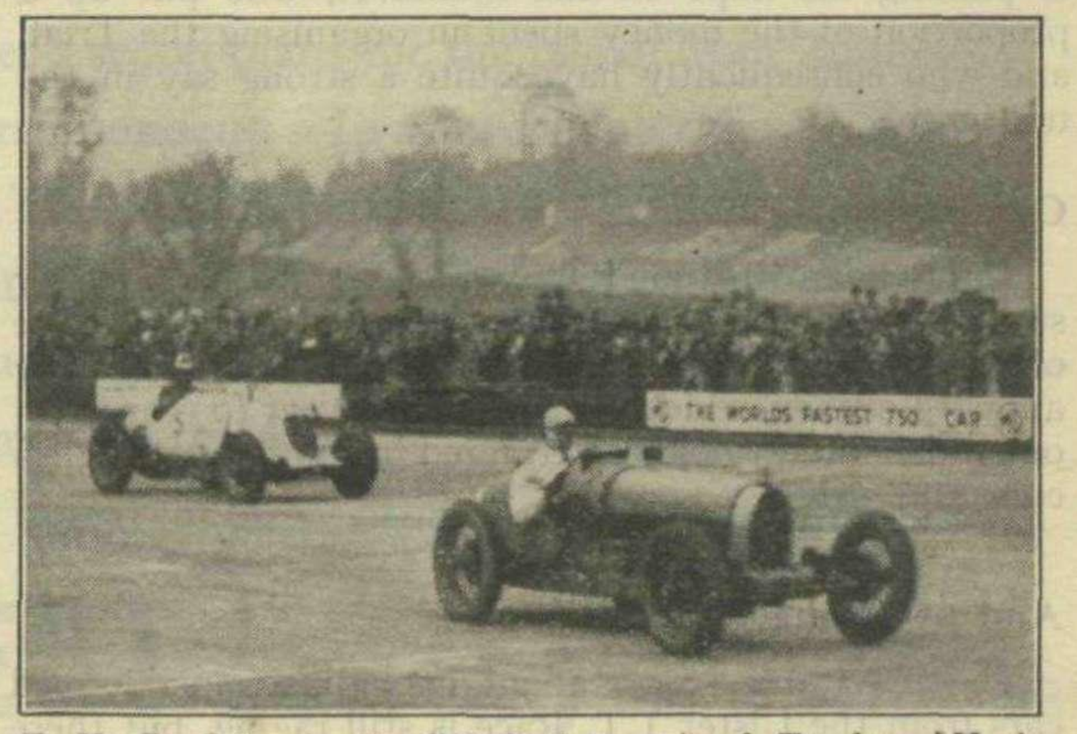
I am not surprised to learn that Lord de Clifford, who has always been a great Lagonda enthusiast, is preparing some Lagonda Rapiers for competition. He has gone into partnership with Mr. C. J. Dobson, the well-known Staines motor-agent, and they are marketing cars with special short throw crank-shafts which bring them within the 1,100 c.c. limit. De Clifford has entered a car in the Le Mans 24 Hours' Race, and hopes to have a team of three for Ulster. Charles Brackenbury will probably be driving with him at Le Mans. Three models will be produced, the less expensive ones being intended for trials work and ordinary fast touring.

When a Handicap Race is Better.

I was a little disappointed with the second Donington Meeting. The 5 lap races were on the whole rather dull, one driver always being a good deal faster than the rest of the field, who were strung out in a procession. Then the same cars raced over and over again, and the quality of the entry could have been a good deal better.

Although I am against handicap-racing on principle, I must confess that the 25 mile handicap race was easily the best of the day. To begin with there were 19 starters. Then everyone seemed to have much more "hell-for-leather" spirit, and finally there were some far faster cars entered.

But I am afraid the fact that it was a handicap affair is not the real cause for the success of this race. The



F. V. G. Selby in the J.C.C. International Trophy. He is seen about to be passed by Whitney Straight on his Maserati.

RUMBLINGS—continued.

reason could be found on page 9 of the programme. For the 5 lap races the 1st prize was £5, and for the 25 mile event £20. Can you blame the drivers for not entering in the former ?

Stock Car Events.

Sports car races have been rather obscured during the last two years by the many magnificent Grand Prix events which have been run. The idea of a 4,000 miles race does seem to have focussed fresh interest on this aspect of the sport. The organisers of the Tour of Italy, which is the new name of the Coppa d'Oro del Duce, have certainly tried their best to attract foreign support, with free oil and petrol, special accommodation for English drivers, and facilities for getting spares and team lorries through the Customs on triptique. Only five British entries have been received, namely Aldington on a Frazer-Nash, Bezzant and Fay Taylour on an Aston Martin, Minshall on a Singer Nine, Harrop's M.G. and Jack Hobbs on a Riley.

Unfortunately the interpretation of the regulations designed to keep out non-standard sports cars is a little hazy. 100 cars of a certain type must have been sold before a car is eligible to enter. Bertelli is taking no chances and has entered an Aston made two years ago. Aldington, on the other hand did not see the sense of entering a car inferior to the present productions on the market and asked the Italian authorities whether he may run a car with the latest overhead camshaft Frazer-Nash engine, on the strength of having bought the material for a hundred such engines. The only reply received at first was a telegram repeating the more obscure part of the regulations. Latest news is that the entry was refused.

Alpine Entries.

The same regulation applies to the Alpine Trial, and Aldington who is a most energetic person, has requested the R.A.C. to bring forward the alternate suggestion, that the qualifying number shall be proportional to the output of the factory. The Club profess themselves unable to do anything about it this year, so Aldington is pinning his hope on the S.M.M.T., who put up a proportion of the money spent in organising the Trial, and who consequently have quite a strong say in the matter.

Continental—

The Belgian 10 Hour Race, which seemed particularly suited to English sports cars does not seem to have obtained any support from this country, but that hardy annual Le Mans, which continues from year to year without much alteration, has attracted a number of English cars and drivers.

And at Home.

The inevitable storm about excluding supercharged cars from the Ulster T.T. Race is still raging, but there are prospects of an excellent race.

The handicap has been slightly revised, as will be seen, to prevent undue hardship when capacities of standard sports cars do not follow the International Class limits. The class awards remain unaltered.

The speeds are :—

Class H	Up to 750 c.c.	70.45 m.p.h.
Class G	750– 850 c.c.	70.76 m.p.h.
	850–1,000 c.c.	71.27 m.p.h.
	1,000–1,100 c.c.	74.17 m.p.h.
Class F	1,100–1,200 c.c.	74.39 m.p.h.
	1,200–1,300 c.c.	74.62 m.p.h.
	1,300–1,500 c.c.	75.08 m.p.h.
Class E	1,500–2,000 c.c.	75.08 m.p.h.
Class D	2,000–2,550 c.c.	76.48 m.p.h.
	2,550–3,000 c.c.	78.06 m.p.h.
Class C	3,000–5,000 c.c.	78.43 m.p.h.
Classes A and B ...	...5,000 to unlimited	78.81 m.p.h.

The subdivision in Class G should tempt some Singer owners to do battle with the more highly-developed Rileys, and Class D may once more attract some " 90 " Talbots. The two-litre class, as the financial papers say, remains dull.

Regulations regarding external alterations and " bona-fide commercial models " will this year be interpreted in the strictest sense, and cars which are drilled full of holes where the standard ones have solid metal will find themselves excluded.

Further Chops and Changes.

Meanwhile Esson-Scott's former two-litre has found a new home. It has been acquired by Houldsworth, a Bugatti enthusiast who runs a large and well-equipped sports car tuning place in Cambridge. He invited me to try the brakes of my car on his beautiful new testing machine the last time I was up there, but knowing their stopping-power all too well, I declined with thanks. It was a bad week-end, that, for not only were my brakes not good, but the shock-absorbers suddenly ceased to function at the same time.

Cornering without shock-absorbers is actually quite an interesting pastime, and you learn a great deal about the effect of easing the throttle to bring the tail round.

Monoposto Austin.

Most people know the official Austin Seven team with their tiny light-green streamlined bodies, but they would have failed to recognise the special car built for road-racing which Driscoll was to have driven in the last International Trophy. The engine is the one specially tuned by Murray Jamieson and which was fitted to the car which took some 750 cc. records in April. A skeleton body hardly concealed the narrow chassis with its off-set transmission and the front axle was a straight tube, a little reminiscent of a G.N., but with the usual Austin transverse spring beneath it. It put up a fine performance in the hands of Driscoll in the Whitsun Meeting at Brooklands.



HUSH-HUSH ENTRY IN ROUND-THE-HOUSES RACE

I am now able to reveal Gordon Harker's secret plans for the Isle of Man Round-the-Houses race, wires our motoring correspondent. In a special interview to-day, Gordon said his car was a 1901 Spitz. "I bought her from a baker", he declared ("A well-bred car, in other words", interposed Nellie Wallace with her disarming smile), "so she should be good at 'round-the-houses' work. My plan is to get on the tram-lines and stick to them. Of course I'll be running on Pratts High Test, the petrol that's streets ahead of any other." *Daily Tellacram.*

PRATTS HIGH TEST makes every car a better car

RUMBLINGS—continued.

One Man's Meat.

It is extraordinary how opinions vary about the road-holding and performance of any given car. The other day I was discussing with a rather disgruntled owner the cornering of his 1⅞-litre Rumblebus. "Corners like a tram, nothing outstanding the way of performance, and a lot of upkeep required. What I really like are those little 575 cc. Eggwhisks. Dead-smooth at 70 and perfectly stable on wet roads." Next day the former owner of a Rumblebus, "Wish I could afford to buy another one. At present I'm running an Eggwhisk for hack-work but it only does 64, and when you turn the steering wheel suddenly it just leaves the road."

Very Fleet.

Every car seems to have its peculiarity of handling. Talking about the 6½-litre Bentleys one day with "W.O.," their famous designer, I learnt that on Brooklands at any rate these vehicles resented having their steering wheels held tightly, though if allowed to have their own way they took you round almost without effort. In the same way heavy-handed drivers take a little time to get used to the light steering which is an Alfa-Romeo characteristic.

Talking of Alfas, Street and Duller have secured four very attractive 1,750 cc. cars from the factory, all fitted with the usual snappy two-seater bodies. They are all capable of reaching the hundred mark on normal alcohol-blend or ethylised fuels, which makes one question the R.A.C. ban on blowers in the forthcoming T.T. The only difference between the earlier models and the 1932 series, of which they have secured two examples, is that the former had smaller superchargers geared up to give the required boost.

Why Monza ?

A fair amount of confusion has been caused at various times by owners of 2.3 Grand Prix Alfas who called their cars "Monza Alfas." No such type exists in the catalogue, but Duller gave me what seems the first reasonable explanation. An improved type of 2.3 engine developed at the beginning of 1932 was fitted to the G.P. and sports cars chassis the next year, so the name "Monza" is applicable to the engines of all the 2.3 cars built in 1933. Before that the only cars with Monza engines were the works team built just before the Monopostos came upon the scene. Usual disclaimer, I fancy.

The Sporting Spirit.

Considering the few opportunities there are in England for the owner of a fast car, the absence of starting money and the smallness of the prizes offered, it says a good deal for the keenness of racing men over here that they continue to drive their cars. The announcement of the new E.R.A. racing cars, which is given on another page, materially strengthens the position. Next month we hope to give details of another private venture of the same type, while "a famous ex-racing motorist" a term which nowadays includes practically everyone who has watched a Brooklands meeting, is said to be similarly occupied somewhere in the Home Counties. More power to his elbow !

Amongst the Palms.

The English drivers in the Tripoli Grand Prix had an interesting time but were dogged by ill-luck. Eyston was 5th in his second lap at the formidable speed of 115 mp.h. The next lap he broke a piston, but the car was still drivable, and he finished 9th just within the time-limit. Hamilton was running third on his Maserati when his carburetter jet stuck, a thing which happened to the late Sir Henry Birkin in a French Grand Prix some years ago, and he dropped back to fifth place. Straight fell out early in the race with some obscure form of engine trouble.

After Tripoli Straight's Maseratis were loaded on to the équipe lorries and were sent off to Morocco, but a broken front hub on one of the lorries, when passing through Algiers,. nearly led to the wrecking of the vehicle and its load. The car finally reached Casablanca by train.

Straight will not be back in England in time for the Mannin Races, as he and Hamilton are competing in the Grand Prix de Suisse, held on the outskirts of Montreux. Featherstonhaugh will drive the 2.5 Maserati in the Isle of Man, and Straight will return to England in time for the Shelsley Walsh.

Real Mountain Racing.

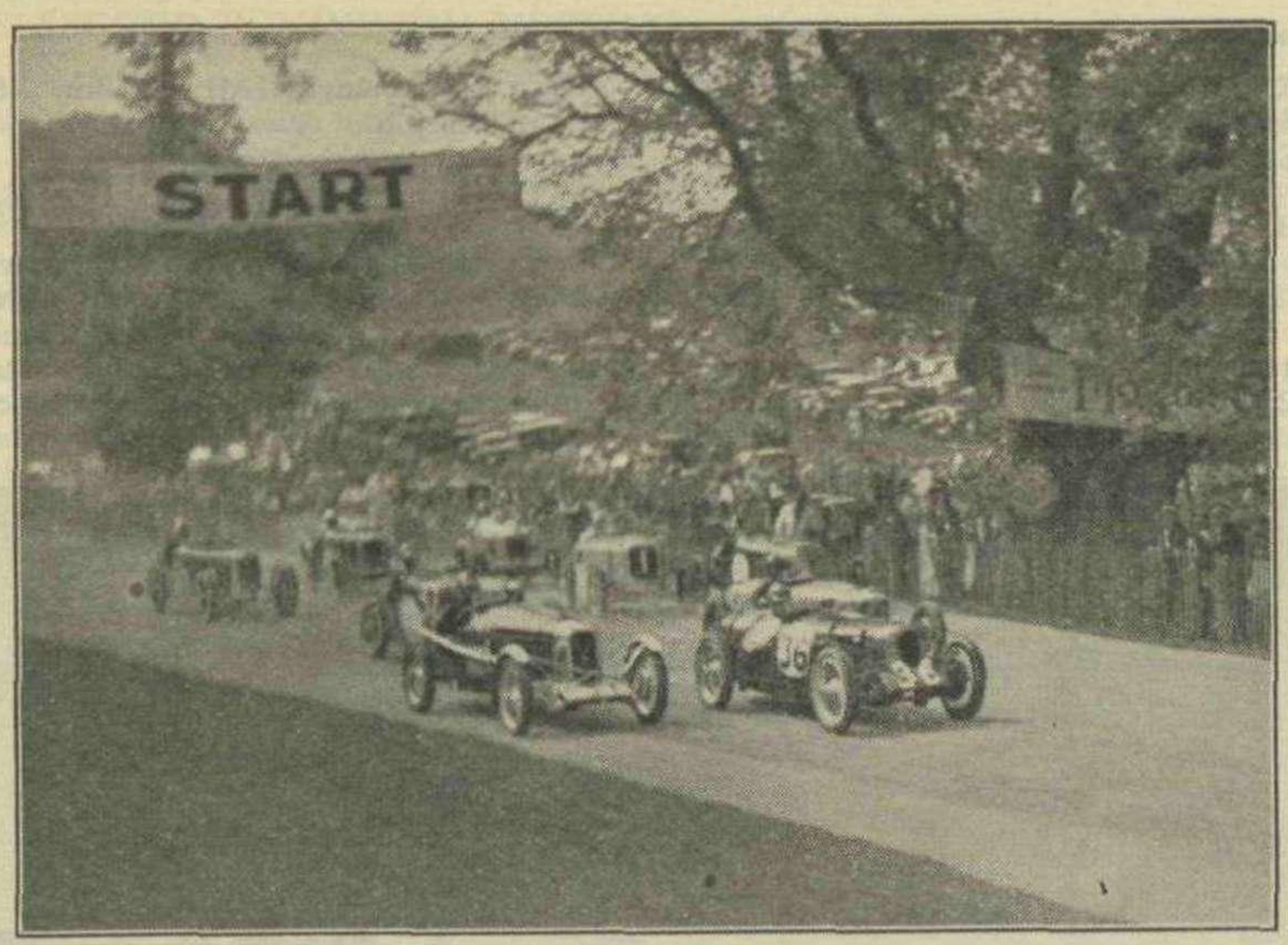
The Eyston—Penn Hughes 2.6 Alfa is being repaired in Paris, and while the "Recordman Anglais" continues to pile up new records at Montlhéry, Penn is setting forth for the Eifel Race, on the famous German course near Adenan. The 37 miles circuit, which winds up and down mountains, and abounds in right-angle corners concealed by hump-back gradients, requires a good deal of knowing, and the English driver will put in an intensive four days learning all he can. The Ferrari Alfas are sending representatives, and also Auto Union, but I understand that the Mercédès cars are not yet quite "au point."

Making Ready.

Arthur Fox is particularly well-versed in preparing cars for competition, and I was interested to see work proceeding on his three 1,500 c.c. Singers. The cars will be standard jobs except for having the 4 ft. 4 ins. front axle instead of the narrow track one which is more popular for trials work; and I admired the balanced crank-shafts and the new heads with inlet and exhaust ports on opposite sides.

The bodies are two-seaters, just wide enough to comply with the sports car regulations, and only weigh 60 lbs. each. Such light construction can only be accomplished by the careful assembly of each part, and consequently these streamlined two-seater bodies cost fully three times as much as the standardised "Le Mans" coachwork.

Brian Lewis is driving one of these cars in the Isle of Man, and also at Le Mans, with Hindmarsh as his fellow driver.



Massed starts are a feature of the Donington Meetings. Here is the field getting away in the 3rd race, with E. K. Rayson (Riley) in the lead.

THE SECOND DONINGTON MEETING

T. P. CHOLMONDELEY TAPPER (1½-LITRE BUGATTI) BREAKS LAP RECORD—GOOD DRIVING BY R. F. TURNER, A. H. L. ECCLES AND E. K. RAYSON—MANY "PROCESSIONS" BUT A GOOD 25-MILE HANDICAP EVENT.

FIFTEEN non-starters out of a total entry of 44 is not a good opening to any race meeting, and when 10 out of the remaining 29 take part in one race only then the chance of the meeting being a complete success is rather remote. This is what happened at Donington Park on May 12th, and somewhat negatived all the benefits of good organization, perfect weather, and the fact that at Donington the spectators have a clear view of the road at all points of the course.

The practice periods provided some excitement when Eason Gibson's Riley suddenly decided to crack its frame (with dire results to the steering gear) while travelling flat out on the straight leg of the circuit. The car visited the grass verge on both sides of the road in a series of lurches before being skilfully brought to rest by the driver.

A crowd of usual Donington proportions was comfortably spread out round the two miles 1,000 yards course, picnic lunches under the shade of the huge oak trees being the order of the day. There were plenty of refreshment tents, and altogether the spectators were well provided for as to their comfort and general view of the road. Incidentally the new stand which is in course of erection overlooking the Starkey hairpin is a magnificent affair, and quite puts to shame the tiny "stand" on the Paddock side of the Fork at Brooklands.

The racing started with a five-lap event for unsupercharged 850 c.c. cars. There were seven starters, all M.G. Midgets, except T. C. Harrison's 8h.p. Ford. Harrison, W. G. Everitt and J. R. Grice got away quickest, and reached the first corner together. In the pack behind there was nearly a good pile-up, for L. Levy lost control of his blue Midget, turning right round in the path of T. J. E. Shute and P. H. Lim. These two cleverly dodged the offending vehicle, which ran slowly down the steep bank on the inside. Levy got back on to the road, but retired after completing one lap, as did Harrison with the Ford.

From then on the race lay between Everitt and Grice, both of whom drove fast and well. Everitt's car was just a little quicker, and he won by a comfortable margin. The other drivers toured round, and were minutes behind at the end of the race.

Event 1. Result.

1. W. G. Everitt (M.G.), 14m. 12s. Speed 54.2 m.p.h.
2. J. R. Grice (M.G.), 14m. 20 1/5s. Speed 53.75 m.p.h.
3. T. J. Schutte (M.G.), 16m. 37 4/5s.
4. P. H. Lim (M.G.), 16m. 50 4/5s.
5. M. J. Else (M.G.), 17m. 4s.

Fastest lap, W. G. Everitt, 2m. 47 2/5s.

An innovation, which was functioning exceedingly well, was a system of telephones from various points of the course, connected to the broadcaster's room. In this way it was possible to check the progress of the cars all round the circuit, thus greatly adding to the enjoyment of the racing.

Event 2 produced a field of five cars. There might have been six, for Fred Allen actually came to the line on the M.G. which he inverted so spectacularly at Southport the previous week, but for some reason or other he drove back into the Paddock. R. F. Turner, G. H. Goodson and C. D. Parish, all on Austins, were in the front row. On the fall of the flag these three rushed towards the corner, Goodson getting a slight lead, but Turner reaching the goal first.

Turner built up a long lead in the first lap, and soon he appeared at the top of the hill leading down past the Paddock. With only a short cut-out he hurtled round the difficult down-hill curve in a steady slide. Two gear changes brought him to Hairpin Bend, round which he slid in characteristic style, a long way ahead of the field. Goodson was in front of Parish, with the aluminium Cutler Special away back.

On the next lap Parish passed Goodson, and A. R. Samuel (M.G.) retired from the fray. Turner continued to lap with complete regularity at a tremendously high speed. His cornering is about the finest ever seen at Donington, and his handling of the little dark red Austin amounts to nothing less than genius. To watch that long downhill slide was worth the journey from London alone. And so the race finished, Turner winning by nearly a minute from Parish.

Event 2. Result.

1. R. F. Turner (Austin), 13m. 4s. Speed 58.9 m.p.h.
2. C. D. Parish (Austin), 14m. 0 2/5s. Speed 55 m.p.h.
3. G. H. Goodson (Austin), 15m. 43 4/5s.
4. R. J. Richardson (Cutler Special), 15m. 50s.

Fastest lap, R. F. Turner, 2m. 35 1/5s.

A much better field turned out for the third race, for cars blown or unblown up to 1,100 c.c. After the usual hectic start the cars strung out, and by the time the new Starkey hairpin was reached E. K. Rayson had gained a very comfortable lead. His Riley has become accustomed to the "33/180" Mercedes supercharger, and sounded very fierce. Two "L type" M.G. Magnas came next, driven by C. E. Martin and H. L. Maddick, and they were followed by E. Hodges, on a pale blue Le Mans Singer, V. W. Derrington (Salmson), J. R. Grice (M.G. Midget), and Pat Fairfield (Riley), who took to the grass in order to pass A. R. Samuel (M.G.) and A. J. Cormack (Alta). Cormack, however, was not to be disposed of so easily, and his supercharged Alta displayed great acceleration in passing Samuel, Fairfield and Grice on the short stretch before the road rejoins the old circuit with a left-hand bend.

Soon after this Fairfield retired, and Derrington did likewise when he reached

THE SECOND DONINGTON MEETING—continued.

New Starkey on the second lap. The order of the rest of the cars remained the same. Lap 3 showed a change, for Cormack (Alta) had slipped past Hodges when the latter skidded on to the grass at New Starkey. On the very last lap Cormack passed Maddick (M.G. Magna), and Samuel got ahead of Grice, but otherwise the order remained as before, with Rayson winning very easily by 49 seconds from Martin.

Event 3. Result.

1. E. K. Rayson (Riley), 13m. 0 1/5s. Speed 59.28 m.p.h.
2. C. E. Martin (M.G.), 13m. 49s. Speed 55.8 m.p.h.
3. A. J. Cormack (Alta), 13m. 52 3/5s. Speed 55.5 m.p.h.
4. H. L. Maddick (M.G.), 13m. 53 1/5s. Speed 55.6 m.p.h.
5. E. Hodges (Singer), 14m. Speed 55.03 m.p.h.
6. A. R. Samuel (M.G.), 14m. 27s. Speed 53.5 m.p.h.
7. J. R. Grice (M.G.), 14m. 33s. Speed 53 m.p.h.

Fastest lap, E. K. Rayson, 2m. 33 4/5s.

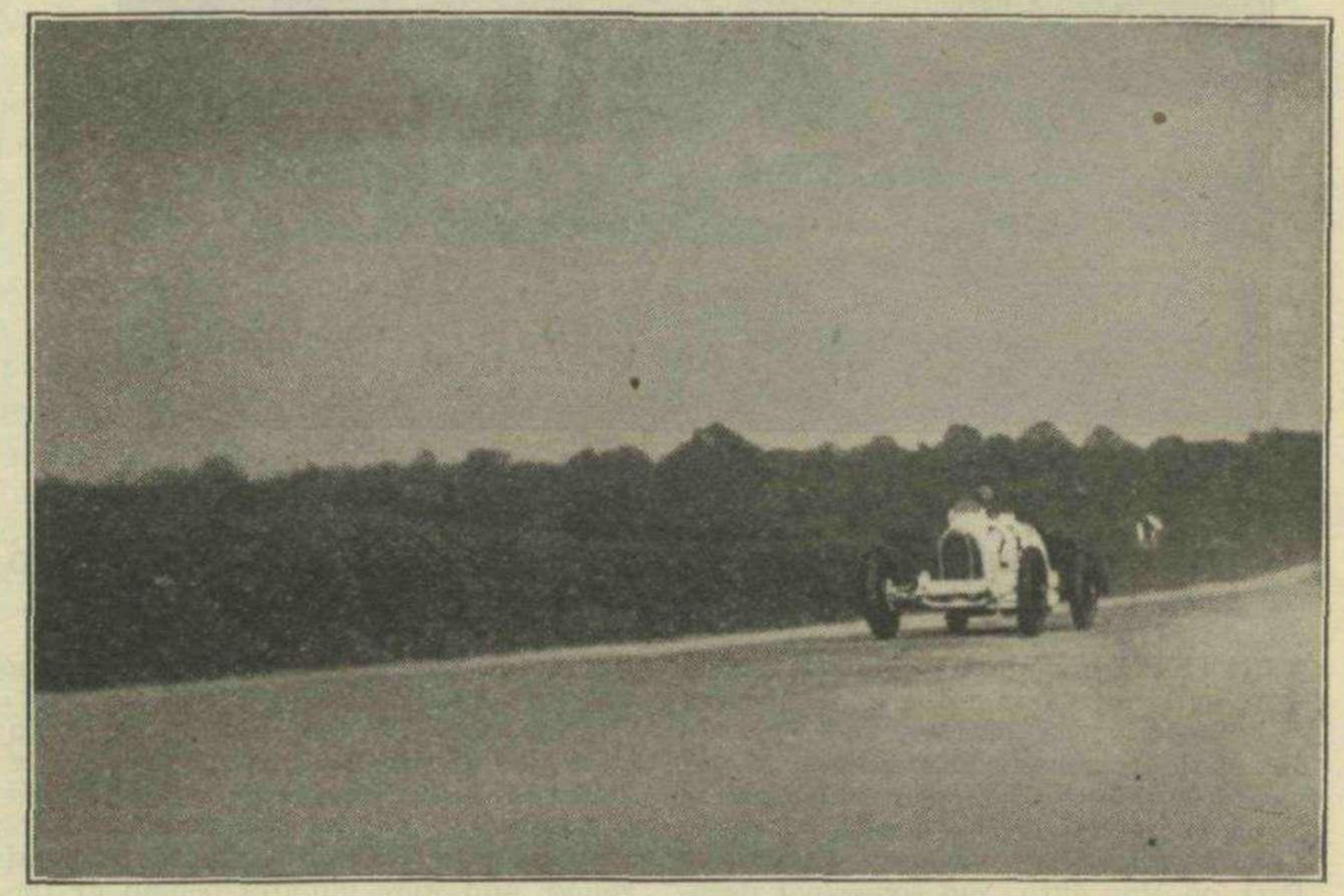
The next race was for 1,500 c.c. cars unsupercharged, and produced a keen struggle between those old protagonists, Frazer Nash and Bugatti. H. H. Porter Hargreaves (Frazer Nash) made the best getaway and led for the first lap, closely followed by T. P. Cholmondeley-Tapper (1½-litre Bugatti) and Roy Eccles (Frazer Nash). Astern came C. Richardson (Riley), E. Hodges (Singer), S. C. Holloway (Riley) and J. R. Grice (M.G. Midget).

On the second lap Cholmondeley-Tapper took the lead from Porter-Hargreaves, with Roy Eccles pressing his car to the limit just behind. Richardson's Riley passed out and retired at the pits, and Hodges did some lurid work at New Starkey. On one occasion he rushed on to the grass backwards, put his foot hard down to make a rapid departure—and promptly made another complete circle instead! The leaders remained in line-ahead formation, the white Bugatti vanquishing the two Frazer Nashes by a margin of four secs.

Event 4. Result.

1. C. Tapper (Bugatti), 13m. 41s. Speed 56.3 m.p.h.
2. H. P. Hargreaves (Frazer Nash), 13m. 45s. Speed 56.03 m.p.h.
3. R. Eccles (Frazer Nash), 13.m 47 4/5s. Speed 56.5 m.p.h.
4. E. Hodges (Singer), 14m. 5 1/5s. Speed 54.7 m.p.h.
5. H. L. Maddick (M.G.), 14m. 27s. Speed 53.5 m.p.h.
6. J. R. Grice (M.G.), 14m. 43 1/5s. Speed 52.4 m.p.h.

Fastest lap, H. H. P. Hargreaves, 2m. 42 2/5s.



A fine speed impression of T. P. Cholmondeley-Tapper, who finished second in the 25 Mile Handicap Race.

The next race was, with the possible exception of the last, the least interesting of the whole programme. Rayson's Riley easily had the measure of Cormack's Alta, Grice's M.A. Midget and P. Maclure's Riley. After two laps the latter fell out, and for the rest of the race the order remained unchanged. Rayson's car sounded very impressive as it roared through Holly Wood from Red Gate Lodge. Grice's Midget decided to call it a day, and ran a big end.

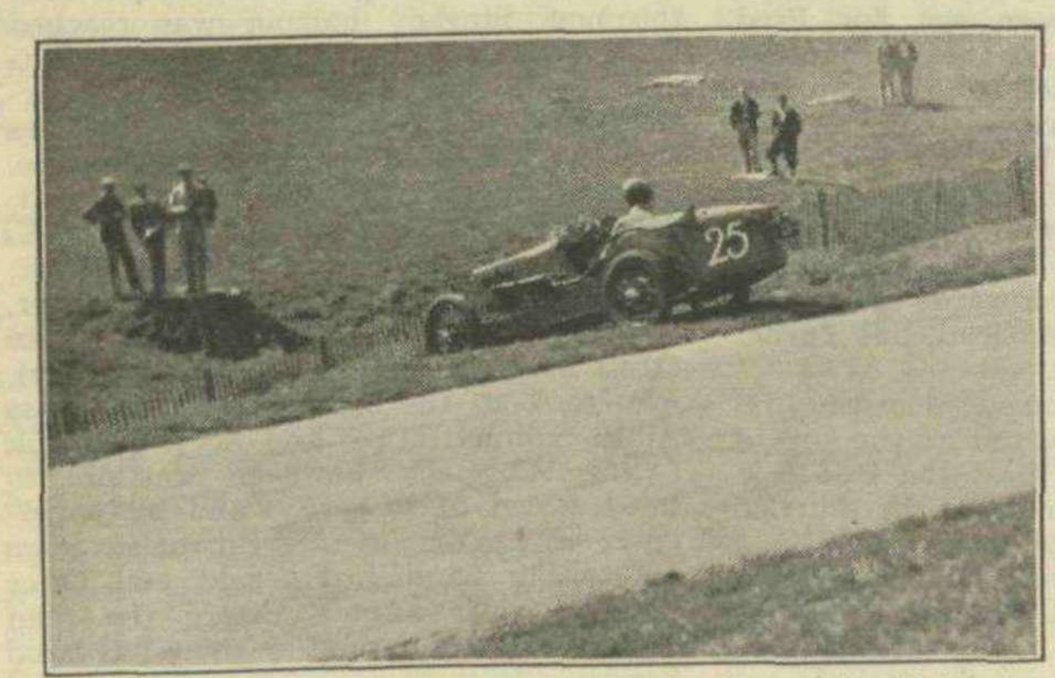
Event 5. Result.

1. E. K. Rayson (Riley), 13m. 15 2/5s. Speed 58.1 m.p.h.
2. A. J. Cormack (Alta), 13m. 48s. Speed 55.9 m.p.h.
3. J. R. Grice (M.G.), 15m. 32 4/5s.

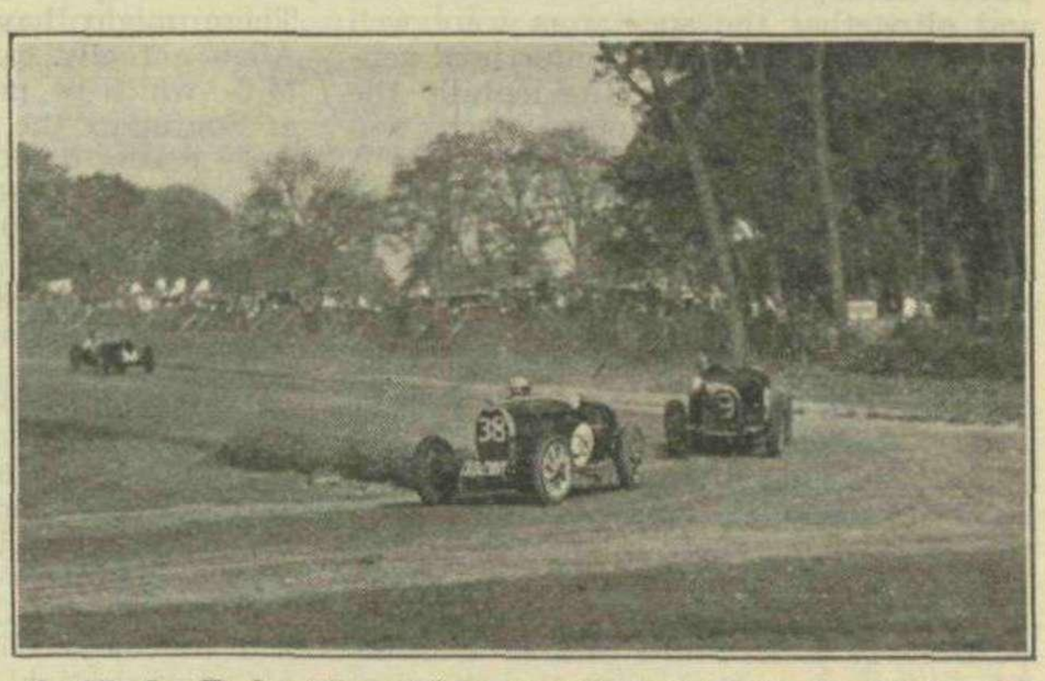
Fastest lap, E. K. Rayson, 2m. 37 3/5s.

Then came *the* event of the day, to wit, the 25-Mile Handicap Race for cars blown or unblown up to 3,000 c.c. After much sorting out the field was gradually spread out on the road before the Paddock, although much frenzied work had to be done to Hodge's Singer before it could be persuaded to engage its gear ratios in the required order.

At last some nineteen cars were lined up, while marshals informed the drivers of their handicaps—which were not according to programme. L. Levy was the first to start, with his blue M.G. Midget, quickly followed by E. Hodges (Singer). Then A. Powys-Lybbe (Alvis Silver Eagle) and T. C. Harrison (8 h.p. Ford) shot away together, and a moment later an M.G. battle occurred when C. E. C. Martin and H. L. Maddick



This undignified position was taken by F. Levy (M.G.) in the first race of the day. The car was undamaged.



A. H. L. Eccles (Bugatti) came right through the field from scratch in the 25 Mile Handicap Race. In this photograph he is about to pass N. S. Embiricos (Bugatti No. 38).

THE SECOND DONINGTON MEETING—continued.

unleashed their green Magnas. C. D. Parish had a " solo start " with his black Austin, but C. H. Goodson (Austin) and C. Richardson (Riley) scrapped hard for the corner. Another one-make battle—this time Frazer Nash—occurred when H. H. Porter-Hargreaves and J. D. Greaves were given the word " Go ! " but the starter seemed a little worried at this stage as to whether the cars were being dispatched in their correct sequence. For the first time three cars went away together, T. S. Tresilian's 2-litre Bugatti, G. A. Mangoletsi (Lea-Francis) and V. W. Derrington (Salmson). Then two of the best Donington drivers were waiting to join the fray, R. F. Turner (Austin) and T. P. Cholmondeley-Tapper (Bugatti). The Austin rounded the corner first, but not without taking to the grass in order to do so. Another pair, E. K. Rayson (Riley) and N. Embiricos (Bugatti), and then the scratch man was alone on the line, A. H. L. Eccles, with his black 2·3 litre Bugatti. Fred Craner dropped his flag, the tail of the Bugatti rose in the air as the wheels spun furiously, and then Eccles was away in pursuit of the 18 cars ahead of him.

On the first lap there were few alterations, but Richardson drew into the " pits " to retire. Cholmondeley-Tapper was ahead of Turner, and Porter-Hargreaves had dropped back a bit. On the run down to Hairpin Corner, Tresilian looked a little hectic when he got into a series of skids after passing Derrington, but he controlled his Bugatti well and made the corner successfully. Hodges was as irrepressible as ever, and shot across the grass towards the dangerously-placed tree, missing its burly girth by a hair's breadth.

At the end of the second lap Hodges (Singer) was in the lead, a feat for which he received applause, and behind him came Powys-Lybbe (Alvis), Harrison (Ford), Levy (M.G. Midget), Martin (M.G. Magna), Maddick (Magna), Parish (Austin), Goodson, (Austin), Greaves (Frazer Nash), Tresilian (Bugatti), Cholmondeley-Tapper (Bugatti), Mangoletsi (Lea-Francis), Turner (Austin), Embiricos (Bugatti), Rayson (Riley), Derrington (Salmson) and Eccles (Bugatti).

During the ensuing lap Powys-Lybbe pushed ahead with his black 4-seater Alvis and appeared in the lead with Hodges a good second. Martin retired at Starkey, so Maddick was now fourth behind Harrison. Cholmondley-Tapper was making great strides, handling the Bugatti with cool and determined skill. Greaves, too, was driving a good race, while Eccles had jumped up from last place to 11th.

Another lap was covered, and still Powys-Lybbe clung to his lead, but then the old car gave up the fight and came to a halt at Starkey. This let Hodges back into the lead once more, a position he deserved for his spirited driving. Eccles was drawing nearer and nearer, however, and on the 8th lap he was in the van, a burst of applause coming from the excited spectators as he rounded Hairpin Bend. Hodges was now second, with Maddick third and Cholmondeley-Tapper fourth. Behind came Harrison, Rayson, Turner, Tresilian, Embiricos, Parish, Goodson, Mangoletsi, Levy and Derrington. Both Frazer Nashes had retired.

Rayson was the next man to come into the picture, and on the 9th lap he passed Cholmondeley-Tapper and Hodges, to take second place behind Eccles. Then on the very last lap a cloud of blue smoke came from the Riley as its engine disintegrated violently, blowing the valve caps off in the process. And so Cholmondeley-Tapper got his " second " after all, with Hodges a good third. Fourth came Turner, and fifth Harrison. All three drivers deserved their places, and Eccles gave a clean, impressive display in coming through from scratch. After the race it was found that Cholmondley-Tapper had broken the lap record with a time of 2m. 25s. as against the 2m. 3 1.2s. figure of A. H. L. Eccles at the first meeting. This represents an extraordinarily fine performance with an unblown one-and-a-half litre car.

Event 6. Result.

1. A. H. Eccles (Bugatti), 24m. 58 2/5s. Speed 61.8 m.p.h.
2. T. P. Tapper (Bugatti), 25m. 49s. Speed 59.6 m.p.h.
3. E. Hodges (Singer), 27m. 29s. Speed 56.1 m.p.h.
4. R. F. Turner (Austin), 26m. 11s. Speed 58.9 m.p.h.
5. T. C. Harrison (Ford), 27m. 23s. Speed 56.2 m.p.h.
6. H. L. Maddick (M.G.), 27m. 20s. Speed 56.4 m.p.h.
7. N. Embiricos (Bugatti), 26. 23s. Speed 58.3 m.p.h.
8. S. S. Tresilian (Bugatti), 27m. 10 3/5s. Speed 56.7 m.p.h.
9. C. D. Parish (Austin), 28m. 37s. Speed 53.8 m.p.h.
10. G. A. Mangoletsi (Lea Francis), 28m. 43s. Speed 53.7 m.p.h.
11. G. H. Goodson (Austin), 29m. 17 3/5s. Speed 52.7 m.p.h.
12. E. K. Rayson (Riley), 28m. 32s. Speed 54 m.p.h.
13. L. Levy (M.G.), 31m. 05s. Speed 49 m.p.h.

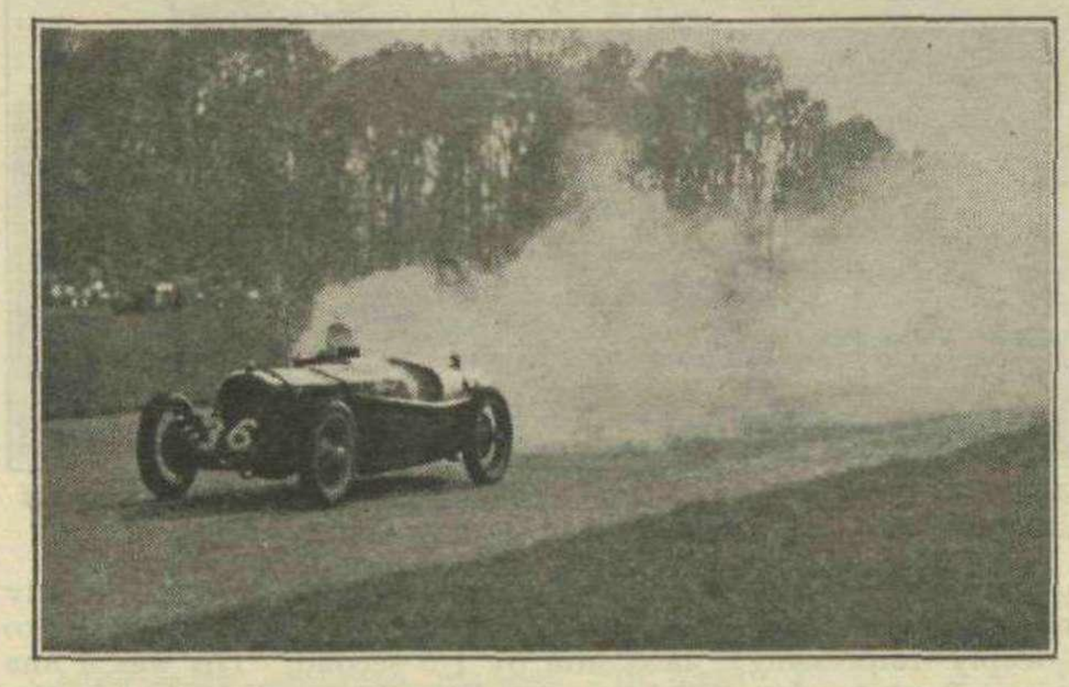
Fastest lap, T. P. Tapper, 2m. 25s. (Record Lap).

The organisers would have done well to cut out the last race entirely, for by comparison with its predecessor it was extremely dull. T. S. Tresilian (2-litre Bugatti) led from start to finish, and although pressed by A. J. Cormack (Alta) on the first lap, he had little difficulty in keeping ahead. The only other runner was A. R. Samuel (M.G. Midget), whose car had not been functioning efficiently earlier in the day. Now he remedied the trouble, and he drove well in a race which proved to be a poor finale.

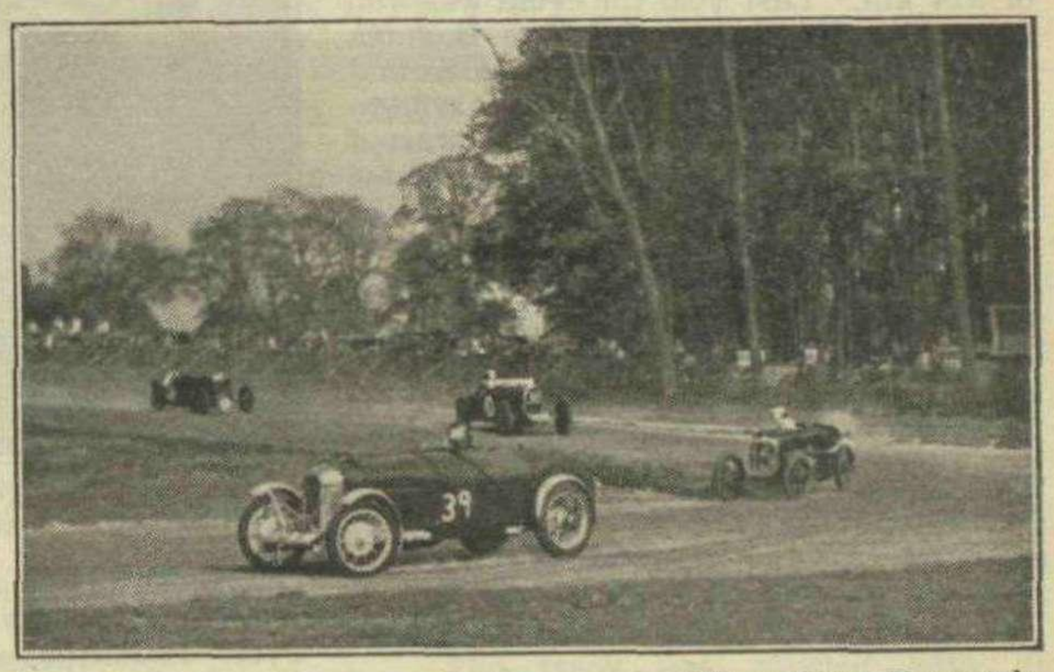
Event 7. Result.

1. S. S. Tresilian (Bugatti), 13m. 11 3/5s. Time 58.6 m.p.h.
2. A. J. Cormack (Alta), 13m. 22s. Speed 57.9 m.p.h.
3. A. R. Samuel (M.G.), 14m. 31 2/5s. Speed 53.3 m.p.h.

Fastest lap, S. S. Tresilian, 2m. 35s



Blown up ! E. K. Rayson's Riley fell out of the 25 Mile Handicap when lying in second place.



[*Motor Sport Photographs*

V. W. Derrington (Salmson), R. F. Turner (Austin), and N. S Embiricos (Bugatti) round the Starkey hairpin in the 25 Mile Race

DO YOU WANT TO SELL YOUR CAR?

21 words in our Classified Advertisements Section will cost only **3/-**

The Latest time for receipt of Advertisements is the 25th of the month previous to publication

Apply—The Publisher, Motor Sport (1929) Ltd., 39, Victoria Street London, S.W.1

TRIPOLI GRAND PRIX WON AT 116 M.P.H.!

COLOSSAL SPEEDS ON THE MODIFIED MELHALLA CIRCUIT—FERRARI DRIVERS TAKE FIRST THREE PLACES—HAMILTON DOES WELL BEFORE RETIRING.

THE Tripoli Grand Prix just had to be a success this year. The prize and appearance money assumed such tremendous proportions that no driver could afford to stay away, with the result that a really first-class entry list was obtained. In addition, under the energetic direction of that popular national hero, Marshal Italo Balbo, who is now Governor-General of Libya, the advertising and general organising of the race was carried out with extreme thoroughness.

The Circuit of Melhalla, over which the race is run, is an artificial course built on a sandy desert, measuring 13 km. 100. It consists of long straights joined by corners, and the fine surface allows tremendously high average speeds to be obtained. The race is run over 40 laps, or 524 km. Last year the event was won by Achille Varzi on a 2.3 litre Bugatti, at an average speed of somewhere around 104 m.p.h. Meanwhile, the road has been improved, and when practising started a few days before May 6th it soon became clear that the speed of the race would be considerably increased. For example, Chiron, Moll, Carraroli, Varzi and Tadini all covered laps at over 120 m.p.h.

A great deal of interest was aroused by the presence of Peter de Paolo and Lou Moore, with their Millers, which proved to be very fast, but badly handicapped by their inferior brakes. One slight crash occurred in practice, when Freddie Zehender shot off the road at Tagiura—fortunately without real injury to himself or his car.

A huge crowd assembled on the day of the race, and the start was given by Marshal Balbo amid great excitement. Taruffi immediately leapt ahead with the 16-cylinder Maserati, which Fagioli used to drive with such great effect. Hot on his heels came the Ferrari drivers, Chiron, Varzi and Moll, all on the new Type B monoposto Alfa-Romeos. For seven laps Taruffi kept ahead, try as Chiron might to catch him, and then, when uneasiness was beginning to be felt in the Ferrari pit, came the news that the dark-skinned Italian had misjudged his speed and left the road at a corner.

This gave Chiron his chance and he slipped into the lead, but eight laps later he had to call at the pits to change a wheel, and his turn had gone. Varzi now led, hotly pursued by H. C. Hamilton, driving Nuvolari's Maserati (now the property of Whitney Straight), Moll (Alfa-Romeo) and Wimille (Bugatti). Straight himself had had to retire with engine trouble on the eleventh lap, a complaint from which many of the cars were suffering. However, Hamilton was deeply impressing the Continental authorities by his calm, yet very fast, driving.



This photograph gives a good idea of the nature of the Tripoli circuit. The super-elevated curves allow tremendously high speeds to be maintained.

Chiron got back into second place, but he could make no impression on Varzi. The Bugattis were not having a good day, Brivio having burst his engine in practice, and Wimille having to retire with a broken oil-pipe. Only Dreyfus persevered with the race, and he was forced to call several times at the pits. Etancelin had blown up his Maserati in practice, and was taking it quietly.

Then Hamilton retired, too, his trouble being connected with the magneto. G. E. T. Eyston was fighting an uphill struggle with his 2.6 litre Alfa-Romeo, for a piston fractured early in the race and he decided to finish on seven cylinders. As we have already noted, Moore and de Paolo, although very fast, were slow on the corners through having to cut out so early.

Moll overhauled Chiron to take second place just before the end. Gradually he closed on Varzi, but he just failed to beat him by 1/5 second. His was a fine drive, and places him still higher in the ranks of first-class G.P. drivers.

RESULT.

1. A. Varzi (Alfa-Romeo 3 litre), 2h. 48m. 53.8s. 115.67 m.p.h.
2. G. Moll (Alfa-Romeo 3 litre), 2h. 48m. 54s.
3. L. Chiron (Alfa-Romeo 3 litre), 2h. 49m. 7s.
4. P. Etancelin (Maserati 3 litre), 2h. 55m. 39s.
5. Biondetti (Maserati 3 litre) 3h. 1m. 43s.
6. R Dreyfus (Bugatti 2-8 litre) 3h. 2m. 12s.
7. P. de Paolo (Miller), 3h. 2m. 25s.
8. L. Moore (Miller), 3h. 6m. 24s.
9. G. E. T. Eyston (Alfa-Romeo 2-6 litre), 3h. 14m. 31s.

Fastest lap by Chiron (Alfa-Romeo) at 124.52 m.p.h.

A GARAGE RUN BY EXPERTS

IT is not often that a new garage is opened under such favourable circumstances as those which marked the inauguration of the Cresta Motor Company, Broadwater Road, Worthing, on Sunday, May 13th. A pleasantly informal cocktail party was "thrown" by the directors, A. W. L. Maclachlan, J. C. and R. C. Elwes, and their friends from near and far turned up to give their blessing to the new venture.

The premises are magnificent. A spacious showroom occupies a corner site, and on this occasion contained a fine display of M.G., Austin, Aston-Martin and Armstrong-Siddeley cars. An exhibit which aroused considerable interest was the cut-away "P" type M.G. Midget chassis, a car which incidentally is building up a wonderful reputation for itself among discerning sports car enthusiasts.

The offices and cloakrooms are furnished and decorated in the most modern fashion, a point in which many garages are still notoriously backward. But the showroom and offices are only the "front," so to speak, and lead into a huge covered garage, which is of sufficient size to provide ample room, even at the busiest week-ends. Conveniently placed is the latest type of Tecalemit high pressure greasing plant, together with the usual washing outfit. At the far end is the workshop, placed so that cars may be driven straight on to the most "luxurious" pit we have ever seen, white-tiled and well lighted.

Altogether we were greatly impressed by the general layout and attention to detail shown throughout the whole garage. The ability and knowledge of Elwes and Maclachlan are well-known among their many friends, but to those who do not know them we would say that both have the benefit of a thorough training in one of the most famous motor-engineering factories in Great Britain. Added to this is the fact that they have tuned and raced their own cars with considerable success for many years, the experience gained in this way rendering the Cresta Motor Company a garage especially suited to the execution of special overhauls which fast cars always need.



They're off! A massed start is always a thrilling sight, and the 37 cars in the International Trophy made a grand get away.

WHITNEY STRAIGHT WINS THE INTERNATIONAL TROPHY

AMERICAN DRIVER'S NARROW VICTORY OVER THE HON. B. E. LEWIS, BOTH DRIVING 3-LITRE MASERATIS —A RACE OF THRILLS AND EXCITEMENT—MANY CARS RETIRE WITH MECHANICAL TROUBLE.

FOUR seconds between first and second at the end of 250 miles! Even the most bitter critic of long distance races at Brooklands will have to admit that the Second International Trophy Race was a thoroughly exciting affair, holding the interest of a fine crowd right up to the very end.

When L. F. Dyer, the Secretary of the Junior Car Club, introduced his new handicap-corners last year, there were many who doubted the possibility of arranging the respective "channels," through which the three Groups pass, in a sufficiently accurate manner. In 1933 the winner was a Group 3 car, the Hon. Brian Lewis's Alfa-Romeo, which finished some 11 minutes ahead of E. R. Hall's M.G. Magnette, a Group 2 car. Satisfactory though this was, the pessimists still doubted the system of handicapping, and foretold an uninteresting race in 1934. The answer lies in the first sentence of this account, for no one can complain about a 4 seconds' gap between the two leading cars! And the smaller machines were not handicapped out of the race, as has been suggested. The only reason why the Group 1 and 2 cars were not more highly placed at the end was that the fastest of them experienced a good deal of trouble mechanically, causing pit-stops, which are fatal in a 250 mile race.

During the morning of the day of the race the weather was showery and altogether unpropitious. About an hour before the start a downpour set in, but when the time came for the cars to be moved from the paddock to the starting line the rain ceased and the sun actually emerged to brighten the scene.

There were five non-starters. Sir Malcolm Campbell, although present at the race, did not feel fit enough to compete after his recent illness. T.A. S. O. Mathieson was still away cruising in the West Indies, in an endeavour to recover from his attack of diphtheria. The 122 m.p.h. Austin did not arrive at the track in time to put in some qualifying laps, and R. J. W. Appleton's Riley-cum-Maserati was not fast enough to qualify.

FACTS ABOUT THE RACE.

Organised by the J.C.C. and run at Brooklands Track on April 28th.

Distance 100 laps. Length of lap varies with each group, according to its handicap-corners.

Previous Winner.

1933, Hon. B. E. Lewis (Alfa-Romeo 2,336 c.c.), 88.07 m.p.h.

Fastest lap in 1933, 92.70 m.p.h. by Sir Malcolm Campbell (Sunbeam) and Whitney Straight (Maserati).

1934 Starters.

Group 3.

Earl Howe (Bugatti 2,263 c.c.).
T. E. Rose-Richards (Bugatti 2,263 c.c.).
Whitney Straight (Maserati 2,992 c.c.).
R. E. L. Featherstonhaugh (Maserati 2,514 c.c.).
Hon. B. E. Lewis (Maserati 2,992 c.c.).
C. R. A. Grant and R. J. Munday (Alfa-Romeo 2,336 c.c.).
L. Chinetti (Alfa-Romeo 2,336 c.c.).
J. R. Cobb (Alfa-Romeo 2,336 c.c.).
Kaye Don (Alfa-Romeo 2,336 c.c.).

Group 2.

N. Black (M.G. Magnette 1,087 c.c.).
D. Froy (M.G. Magnette 1,087 c.c.).
C. J. Dodson (M.G. Magnette 1,087 c.c.).
G. E. T. Eyston (M.G. Magnette 1,087 c.c.).
W. L. Handley (M. G. Magnette 1,087 c.c.).
C. Penn-Hughes (M.G. Magnette 1,087 c.c.).
E. R. Hall (M.G. Magnette 1,087 c.c.).
H. C. Hamilton (M.G. Magnette 1,087 c.c.).
C. F. Manby-Colegrave (M.G. Magnette 1,087 c.c.).
R. H. Eccles (M.G. Magnette 1,087 c.c.).
C. E. C. Martin (M.G. Magnette 1,087 c.c.).
P. L. Donkin and E. Fronteras (M.G. Magnette 1,087 c.c.).
R. T. Horton (M.G. Magnette 1,087 c.c.).
E. K. Rayson (Riley 1,089 c.c.).
A. C. Lace (Invicta 4,467 c.c.).

Group 1.

C. Brackenbury (M.G. Midget 747 c.c.).
J. G. C. Low (M.G. Midget 747 c.c.).
T. Simister (M.G. Midget 747 c.c.).
A. H. L. Eccles (Bugatti 1,990 c.c.).
A. Spottiswood (Bugatti 1,990 c.c.).
T. V. G. Selby (Bugatti 1,990 c.c.).
R. O. Shuttleworth (Bugatti 1,990 c.c.).
A Esson Scott (Bugatti 1,990 c.c.).
F. W. Dixon (Riley 1,633 c.c.).
C. Paul (Riley 1,633 c.c.).
H. G. Dobbs (Riley 1,089 c.c.).
C. A. Richardson (Riley 1,089 c.c.).
T. S. Fothringham (Singer 1,930 c.c.).

The 37 cars were drawn up in lines of 8, the order being determined by the practice lap-speeds. Thus the front row consisted of Straight and Lewis (Maseratis), Hamilton, Horton, and Handley (M.G. Magnettes), A. H. L. Eccles and Esson Scott (2-litre Bugattis) and Charles Brackenbury (M.G. Midget). Most of the cars were beautifully turned out, and Straight's team were outstanding in this respect. The single-seater Maserati was running in the American colours, with the stable's insignia neatly painted on the side.

The track was covered with huge puddles, and some exciting corner-work could be expected for the first few laps. Zero-hour approached, and the drivers climbed into their seats. One by one the cars were started up, until the rise and fall of the 34 exhausts were merged into a chaotic roar.

The National Flag was raised, and on its fall the whole pack leaped forward, with Straight's white Maserati in the van. Actually, with the corners immediately ahead of them, the cars were not unleashed with quite the fury one associates with a massed start, but the spectacle was nevertheless a fine one, and added to by the fact that the cars threw up huge clouds of spray as they traversed the pools of rain water on the track.

In what seemed an incredibly short space of time they were round again, and by now Whitney Straight was a clear leader from Brian Lewis and W. L. Handley, the famous motor-cyclist, who was to-day making his first appearance in a motor-race at the wheel of an M.G. Magnette. Then came Kaye Don, very calm and self-possessed, driving the Alfa-Romeo once owned by Raymond Sommer, H. C. Hamilton (with his streamlined aluminium M.G. Magnette), and Earl Howe (Bugatti). On the second lap the first four held their places, but Freddie Dixon (Riley) displaced Hamilton.

First to call at the pits was Penn-Hughes, who had to tighten the radiator

2 MILES A MINUTE FOR TWELVE HOURS!



FIVE WORLD'S RECORDS

At Montlhéry on April 17th Mr. John Cobb, driving his Napier-Railton with Messrs. F. Dixon, C. Paul and C. Brackenbury as co-drivers, broke the following World's Speed Records previously held by America: 1,000 Kilometres, 6 Hours, 12 Hours, 3,000 Kilometres and 2,000 Miles, all at over 120 m.p.h.

(Subject to official confirmation)

WAKEFIELD Castrol XXL

C. C. Wakefield & Co. Ltd., *All-British* Firm, Wakefield House, Cheapside, London, E.C.2

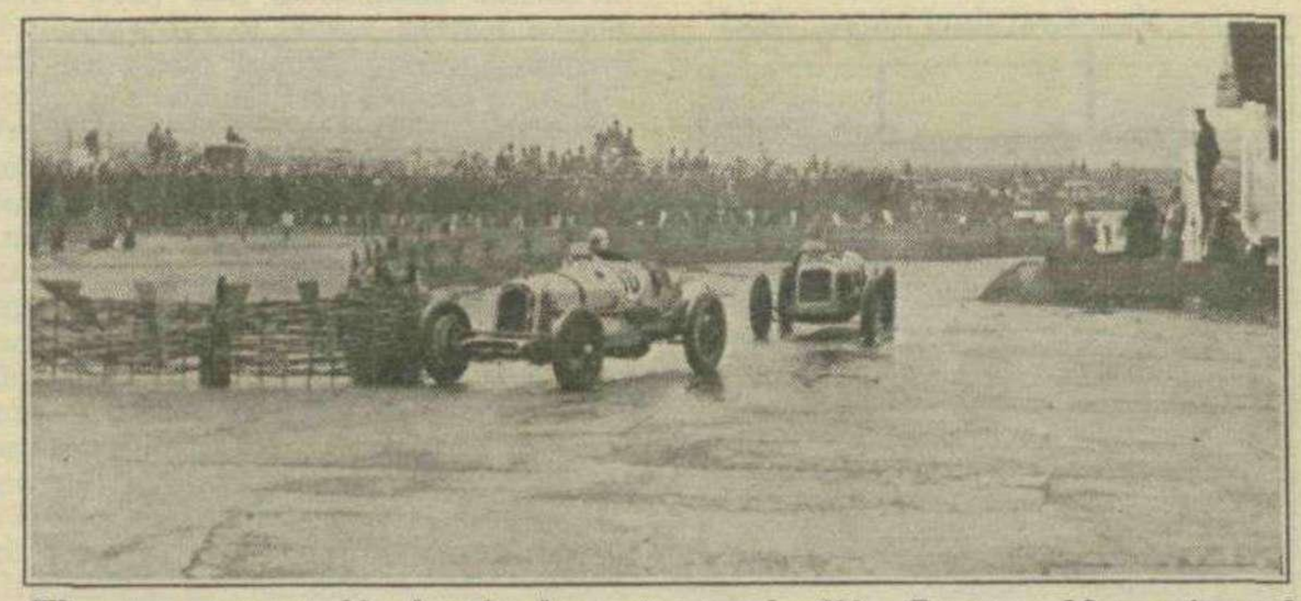
WHITNEY STRAIGHT WINS THE INTERNATIONAL TROPHY—continued.

cap of his Magnette, and a moment later Simister pulled in with a zero oil-pressure on his Midget. A broken oil-pipe was discovered, and he decided to retire. Shuttleworth thought he heard queer noises in the transmission of his 2-litre Bugatti and made a hasty stop for investigation, and at the same time Chinetti, the only Continental driver in the race, was forced out with a broken back-axle. The pits were evidently going to be a scene of considerable activity, for Shuttleworth pulled in again, this time to adjust his magneto, Lace was remedying petrol starvation on the Invicta, Dudley Froy was worried by a dangerously low oil pressure on his Magnette, and Rayson proceeded to change the gasket of his supercharger Riley Nine.

Having recorded the troubles of the unfortunates, let us return to the cars which were fighting for the lead. On the fourth lap Dixon slipped past Kaye Don and Handley to take third place, and for a few laps he even got ahead of Lewis's red Maserati, but returned to third place almost immediately.

After 10 laps had been covered, then, the order of the leaders was as follows :—

1. Straight (Maserati) 87.04 m.p.h.
2. Dixon (Riley).
3. Lewis (Maserati).
4. Handley (M.G. Magnette).
5. Kaye Don (Alfa Romeo).
6. Hamilton (M.G. Magnette).



The race was notable for the large entry of Alfa Romeos, Maseratis and Bugattis. Here are John Cobb (Alfa Romeo) and R. E. L. Featherstonhaugh (Maserati) in close company at the Fork.

Thus far the handicap was working well, for there were cars from all three groups in the first six. The driving was first-class, but one or two men had difficulty in negotiating the S bend in the Finishing Straight. Its appearance was certainly a little confusing, being a medley of flags, barrels and arrows. The danger lay in the last kink of the " S," and the officials on the spot were kept busy replacing the hinged arrow, while Lord Brecknock waved the blue warning flag to approaching drivers. Whitney Straight just grazed a barrel, and had the bad luck to damage a tyre. He made a quick stop at his pit on the next lap, and also took on some fuel, but the delay sent him right back to 10th place.

Others who sent the arrow flying or hit the tub were Horton, Lace, Roy Eccles, Black, Dodson and Esson Scott. The pits continued to seethe with activity, Lace changing plugs on his Invicta, as did Brackenbury on the single-seater Midget, Esson Scott refixed the float-chamber of his black Bugatti, Brackenbury came in again to adjust his brakes, Penn-Hughes found that he had broken a shock absorber bracket, Richardson paused to remove the radiator cover of his Riley, and Grant's 4-seater Alfa-Romeo needed water and fuel.

With Straight out of the picture Lewis might have been able to ease up a little, but Dixon was running a close second and these two fought hard for the special prize given to the leader at 30 laps. After 20 laps the order was :—

1. Lewis (Maserati) 87.20 m.p.h.
2. Dixon (Riley).
3. Spottiswood (Bugatti).
4. Rose-Richards (Bugatti).
5. Kaye Don (Alfa-Romeo).
6. Hamilton (M.G. Magnette).

A feature of this race was the splendid running of the old 2-litre Bugattis, many of which were 5 or 6 years old. Spottiswood, making a welcome return to racing, was actually lying third, and the J.C.C. handicapping system has to its credit the merit of giving 2-litre unblown racing cars a good chance of success.

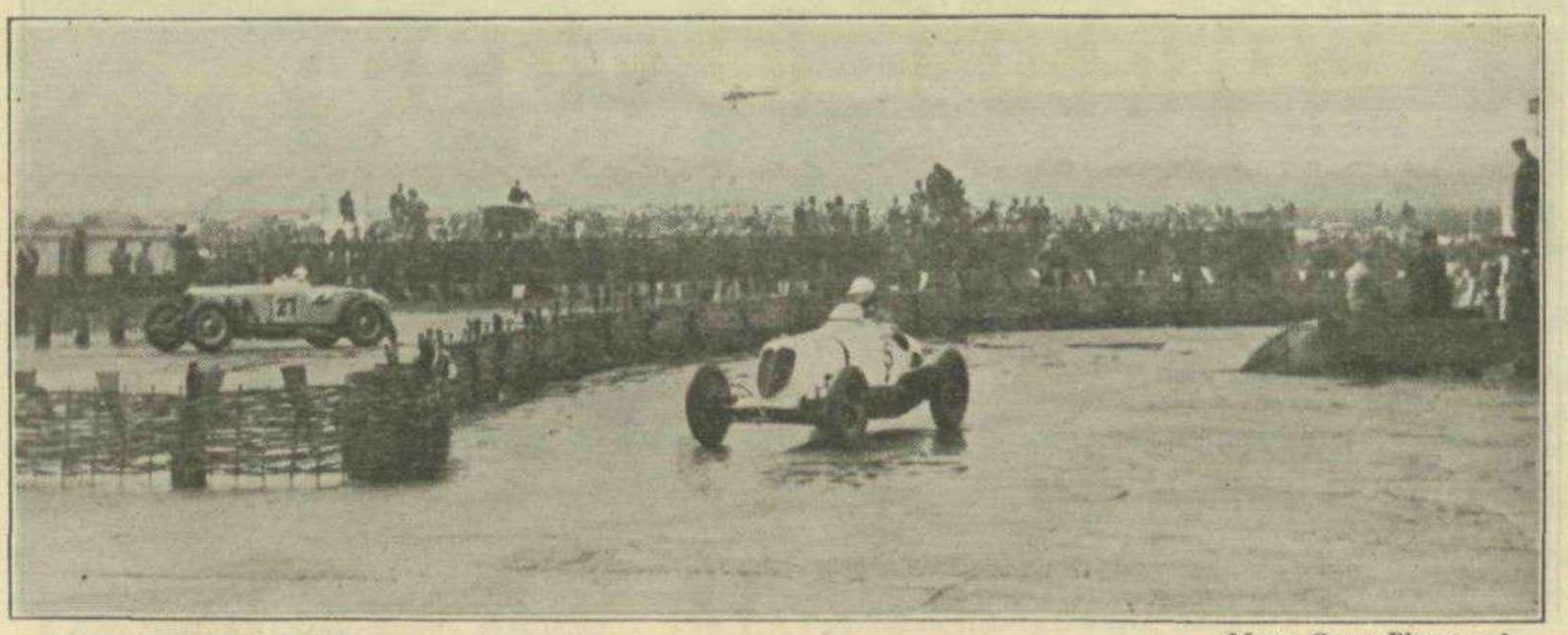
Meanwhile Esson-Scott, Richardson, Shuttleworth, Rayson, Paul, Donkin and Dobbs all called at their pits, in some cases the trouble being the beginning of the end. Donkin, for example, had valve trouble which was later traced to a cotter which had come adrift, causing him to retire.

The £10 bonus for the leader at 30 laps went to Dixon, and at this stage the order was as follows :—

1. Dixon (Riley), 88.16 m.p.h.
2. Lewis (Maserati).
3. Rose-Richards (Bugatti).
4. Straight (Maserati).
5. Kaye Don (Alfa-Romeo).
6. Earl Howe (Bugatti).

It will be seen that Straight was steadily retrieving his lost fortunes, and had already got into 4th place. George Eyston was the next retirement, when for some obscure reason the clutch of the Magic Magna burnt out. The refuelling period saw many cars at the pits, Dixon being among the first and taking three valuable minutes to do the necessary work. Brian Lewis was next due, so we moved along to his pit to see how pit work should really be done. As usual, Wilcoxson was in charge of Noel Rees-Arthur Fox pits, and he had his mechanics trained to the last degree of speed and neatness. The warning signal was held out, and a period of tense waiting ensued. Then Wilcoxson, leaning far out, said " Brian coming in. Board out ! " In a moment the red two-seater had slid to a standstill and Lewis was sitting on the counter of the pit, gulping down a drink. His face had been cut by stones and both cheeks were smeared with blood. In much less time than it takes to write the shock absorbers had been changed, oil and water levels brought back to normal, and 18 gallons of petrol put into the tank—without apparent fuss or hurry and absolutely no splashing of petrol on the ground. Actually the wheels of the Maserati were revolving once more in 46 seconds—a magnificent example of thoroughness and team work.

This stop caused Lewis to be passed by Straight, and consequently at 50 laps the order was as follows :—



Motor Sport Photographs

The ingenious " handicap-corners " can be seen to advantage in this photograph. Whitney Straight's Maserati (No. 5) makes a detour while Lace's Invicta takes an easier path.

WHITNEY STRAIGHT WINS THE INTERNATIONAL TROPHY—continued.

1. Straight (Maserati), 88.24 m.p.h.
2. Lewis (Maserati).
3. Handley (M.G. Magnette).
4. Hamilton (M.G. Magnette).
5. Earl Howe (Bugatti).
6. Rose-Richards (Bugatti).

Dixon was having trouble with fuel feed, and called at his pit once or twice. Featherstonhaugh, in his first long-distance race, was making an excellent impression. The black Maserati was not running too well, but his cornering was neat and fast, while at pit stops his manner was calm and free from any flurry.

At this stage Lace's Invicta was withdrawn with a broken con-rod, and Richardson's Riley was out of the race with a valve gone. Straight continued his consistent leadership, his driving being marked by a neatness and smooth control due to no small extent to a bolt-upright seating position some distance from the steering wheel.

One by one the cars came in to refuel, and the various pits gave an interesting contrast in methods. John Cobb's mechanics were clumsy in the extreme. First the petrol funnel was put in askew with the result that a vast quantity slopped into the cockpit of the car. The next man with a churn of fuel also moved the funnel and got a splashing all over his face for his trouble. And finally the last churn was poured into a full tank, which spouted like a fountain and flooded the track to a depth of about an inch!

Rose-Richards made a quick stop, and the work was carried out quickly and tidily under the compelling orders of Kensington-Moir. Shuttleworth seemed to be more interested in explaining the faults of his Bugatti than in getting on with the race. Brian Lewis made another stop, this time changing his rear-wheels into the bargain in a time of 75 seconds, with the result that at 70 laps he was 1 min. 49 secs. behind Straight. The order was :—

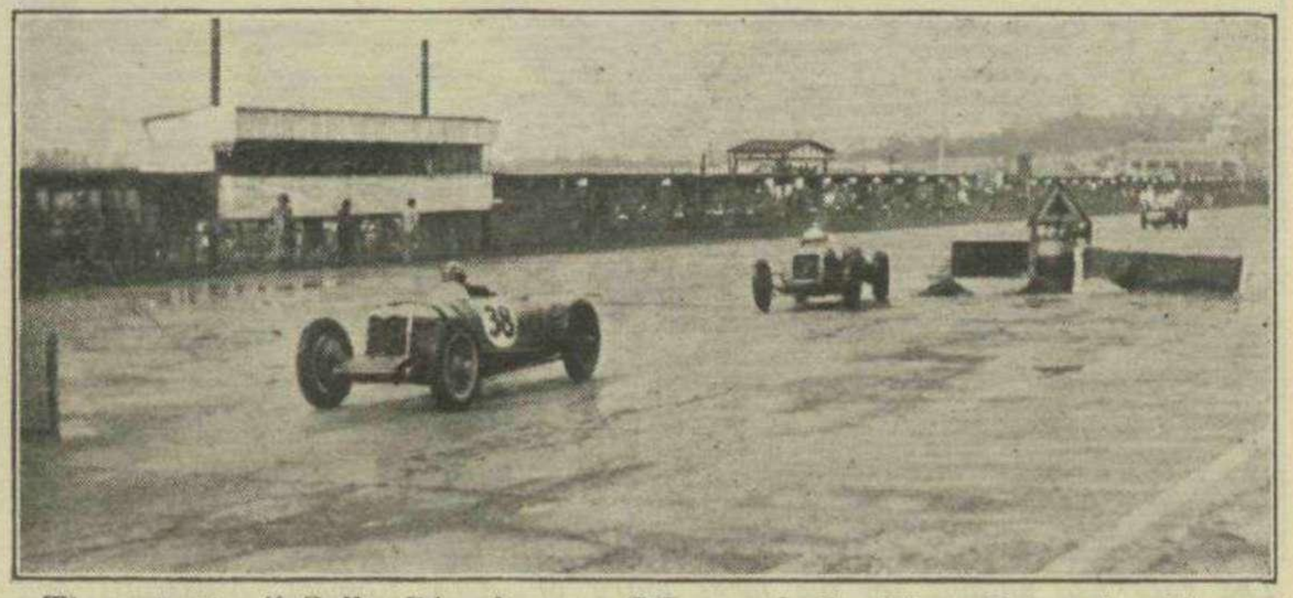
1. Straight (Maserati), 89.26 m.p.h.
2. Lewis (Maserati), 1 min. 49 secs. behind.
3. Rose-Richards (Bugatti), 3 mins. 46 secs. behind.
4. Earl Howe (Bugatti), 4 mins. 7 secs. behind.
5. Hamilton(M.G.Magnette),4 mins. 24 secs. behind.
6. Dodson (M.G. Magnette), 5 mins. 17 secs. behind.

The duel between Straight and Lewis naturally occupied the attention of spectators in the closing stages of the race, and tended to overshadow the performances of the following drivers. Nevertheless some very excellent work was being done by such drivers as Rose-Richards and Earl Howe on Bugattis, John Cobb and Kaye Don on Alfas, and Hamilton, Handley and Dodson on Magnettes.

Straight would have to make one more stop for fuel, to say nothing of tyres, and so we walked to his pit in good time to see the preparations being made. Clive Gallop was in charge, with Lambert attending to the time schedule and our old friend Ramponi "O.C. Mechanics." Ramponi, by the way, is a more placid and distinctly older person than the fiery driver of 1½-litre Alfa-Romeos we used to see some five years ago. The actual pit work did not seem quite as fast as Lewis's, but no time was wasted.

Then came three retirements in rapid succession. Shuttleworth's Bugatti broke an exhaust rocker, Grant's Alfa-Romeo developed incurable ignition trouble, and Wal Handley had to withdraw his Magnette with a broken back axle.

At 90 laps Straight was still in the lead, and it looked as though he would be a comfortable winner. Brian Lewis was



Through the "S." Dixon's new Riley and the Hon. Brian Lewis's Maserati, which duelled fiercely in the earlier part of the race.

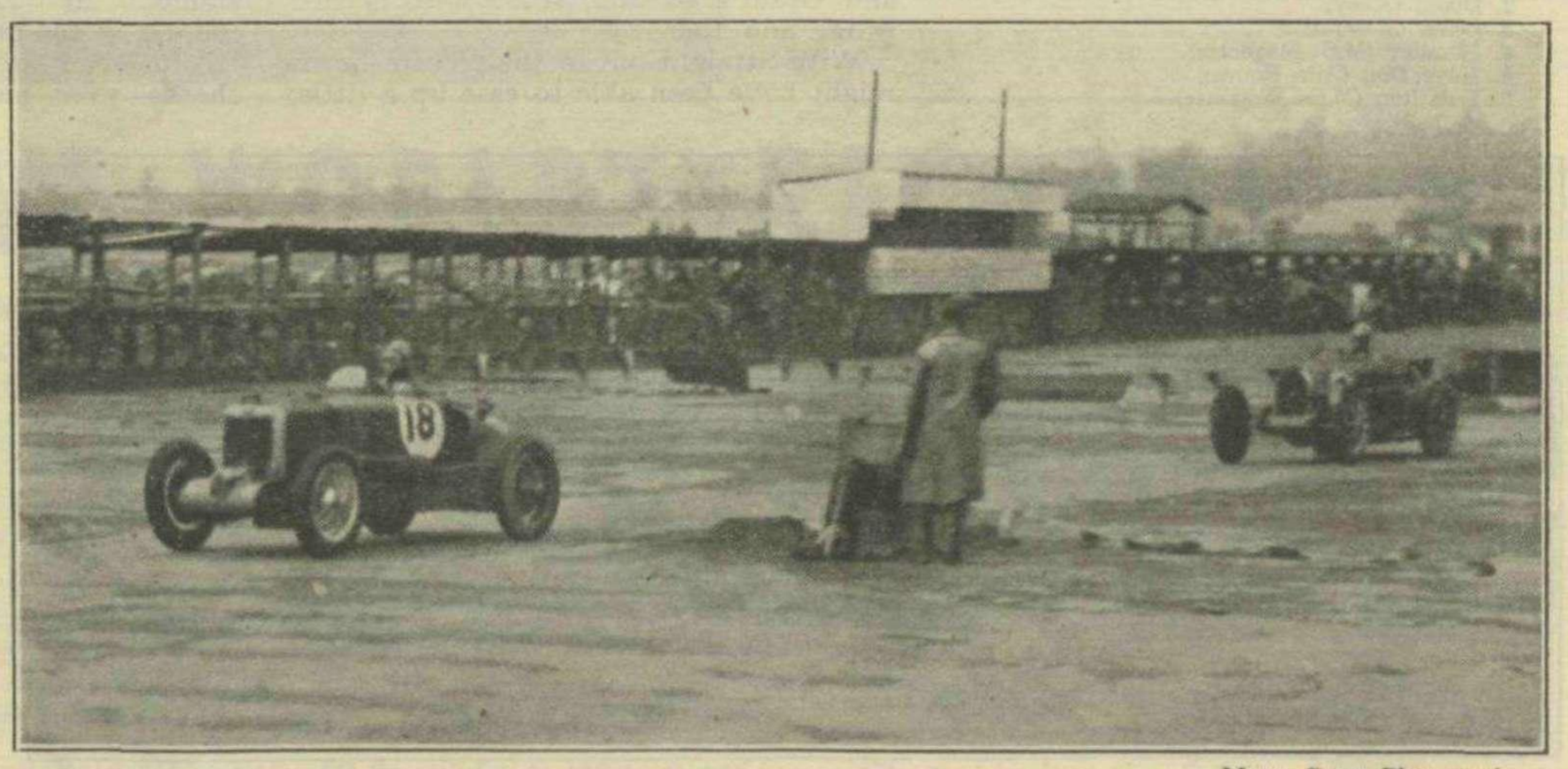
23 seconds astern, and this distance was being increased on every lap. But then an unexpected factor crept into the battle, for the right-hand front tyre of the *monoposto* Maserati began to show its white breaker strip. Straight was forced to drive through the corners in the manner least likely to place a strain on his tyres—all the time knowing that Lewis was hot on his heels.

On successive laps the gap between the two Maseratis was reduced from 18.6 secs., 16.6 secs., 13 secs., 11.6 secs., 9.2 secs., 9.6 secs., 8.6 secs., and finally on the very last lap to 4 seconds. The anxiety on the part of Straight and his pit-staff must have been difficult to bear, and just after the finishing line had been passed the tread did fly off the tyre, so that their victory was a narrow one indeed.

Of the rest of the field, Rose-Richards deserved his third place, and Paul had a nasty moment before finally being flagged home fourth. At the Members' Bridge corner he misjudged his speed and spun right round, only restarting his engine by pushing the car himself. During the rest of the half-hour in which cars were allowed to run after the winners had finished, two more retirements were announced. Dudley Froy, whose Magnette had suffered from lubrication trouble all along, dropped out with a run big-end, and Dobbs (Riley) retired with a fallen oil-pressure. Special praise must be given to Fothringham's Singer, a hybrid 1½-litre enlarged to 2-litres, which ran with extreme regularity throughout.

Altogether the race can be recorded as one of the most successful ever held at Brooklands, containing just that element of suspense at the finish which can make a

Continued on next page.



Motor Sport Photographs

The last marking barrel of the "S" was in constant trouble. Here is a marshal surveying the wreckage, while Penn Hughes (M.G. Magnette) and Earl Howe (Bugatti) roar past.

A SPORTS CAR OF CHARACTER

BEING SOME IMPRESSIONS GAINED DURING THE COURSE OF A WEEK-END'S MOTORING WITH A 1929 T.T. LEA-FRANCIS.

WHAT are the characteristics of a real sports car? This question has probably given rise to more heated discussions among fast motorists than any other (yes, including the banning of superchargers in the T.T.!—ED.) Should a sports car be judged as an "extension," so to speak, of the touring car, giving a faster maximum, more certain road holding and steering, without loss of silence or comfort? Or again, should it be more closely related to the racing car, sacrificing a luxuriously appointed body and mechanical silence to that rough surge of power, perfect weight distribution and positive steering control which only a competition-car can provide?

Frankly, the writer has recently inclined to the former view, asking with apparent logic, "If the So-and-So does 90 m.p.h. in complete silence, and only costs £500, why should other cars be noisy? No one can possibly *like* a lot of noise on a long run."

But now all this has altered, and the change has been brought about by driving once more a good sports car of several years ago. To be exact, the car was the supercharged Lea-Francis driven by Cyril Paul in the 1929 T.T., the last of of its series to emanate from the Lea-Francis factory and do battle in a road race.

This car was very kindly loaned to us for a week-end by that enthusiastic motorist, A. N. L. Maclachlan, who has raced the car at Brooklands and Shelsley Walsh. In the Relay Race of two years ago it average 95 m.p.h. for 30 laps, and a few weeks before we took it over was timed over a flying quarter at Brooklands at 94 m.p.h.

Such a performance from a 1½ litre engine would lead one to believe that the car would be a "handful" in traffic, consuming plugs with avidity and being generally a cause of considerable embarrassment in a Piccadilly jam. Let it be said straight away, that the Lea Francis is just as docile and tractable as any so-called sports model of to-day. The engine continues to fire evenly at tick-over speed for an indefinite period, and will throttle down to 10 m.p.h. on top gear—if you want it to.

Using the same plugs we attained a genuine 90 m.p.h. on the road, but for absolute maximum "hard" plugs are advisable. During the whole week-end the car never misfired a single beat, although no more precautions against missing were taken than one does with a family saloon.

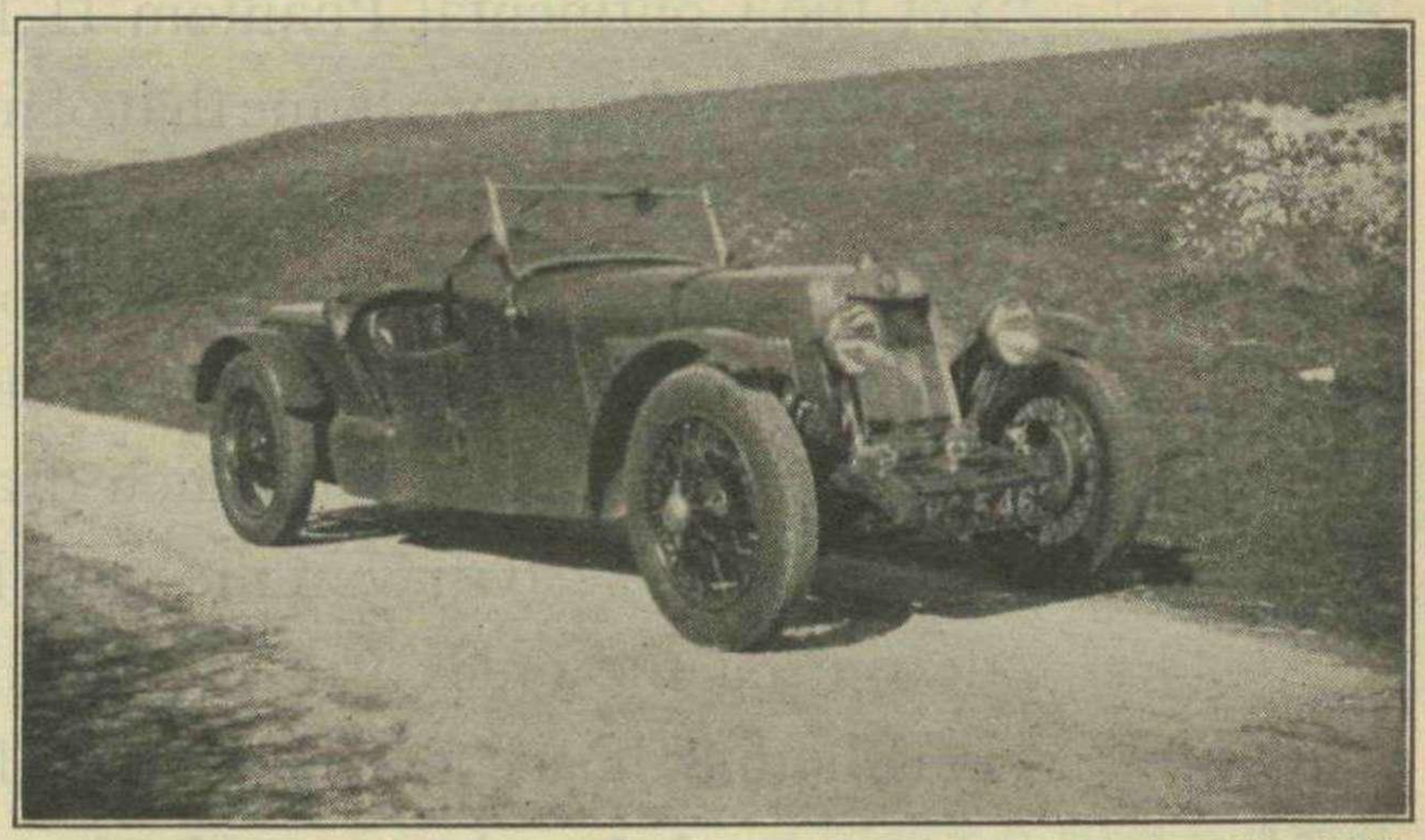
Ordinary "Ethyl" is the car's favourite fuel, there being no need to use a benzol or special petrol. The car was naturally appreciative of intelligent use of the ignition-control, but it did not "pink" easily, and altogether was surprisingly normal in behaviour.

Not the least of the charms of the "Leaf" is its high back-axle ratio, which allows a speed of close on 70 m.p.h. to be maintained at a mere 3,000 r.p.m. At 50 m.p.h. the car is rumbling along with an exhaust note and general "feel" not unlike a 30/98 Vauxhall. In fact, a prolonged scrap with a well-kept specimen of that make on the Eastbourne road resulted in honours being evenly divided.

The road holding is of the type only found in cars built by manufacturers who have raced consistently. It can best be described by saying that one naturally slides the car on open corners, the process being accomplished with a sense of complete security and balance. A little excessive speed just causes more movement of the tail than usual, and is automatically corrected by the high geared steering. The result is that astonishingly high average speeds can be made, the driver delighting all the while in holding the car at skidding-point on every curve and corner.

On returning the car to its owner, Maclachan told us that it had done well over 50,000 miles without being rebored. We found that the oil consumption was almost negligible, and careful driving gave a petrol consumption of 17 m.p.g. Not a little is due in this respect to the extraordinarily good condition in which the car is maintained. The engine was spotless, not a drop of oil showing anywhere, and the whole chassis bore traces of constant attention.

Maclachlan, by the way, has just opened a garage at Worthing, in collaboration with J. C. Elwes, who is well known as an M.G., Austin and Singer driver in competitions. Judging from the tune and general condition of the old "Leaf," sports car owners would do well to entrust their mounts for tuning work to this new venture, the Cresta Motor Co., Broadwater Road, Worthing.



As it now appears The Lea-Francis which was driven by Cyril Paul in the 1929 Ulster T.T.

WHITNEY STRAIGHT WINS THE INTERNATIONAL TROPHY—continued from preceding page.

motor-race a spectacle unsurpassed for excitement.

H.N.

RESULTS AND AWARDS.

1. **Whitney Straight (2,992 c.c. Maserati),** 89.62 m.p.h., 2 hrs. 55 mins. 8 secs.
2. **Hon. B. E. Lewis (2,992 c.c. Maserati),** 89.59 m.p.h., 2 hrs. 55 mins. 12 secs.
3. **T. E. Rose-Richards (2,263 c.c. Bugatti),** 87.62 m.p.h., 2 hrs. 59 mins. 7 secs.
4. C. Paul (1,633 c.c. Riley unsupercharged), 86.05 m.p.h., 3 hrs. 2 mins. 24 secs.
5. Earl Howe (2,263 c.c. Bugatti), 85.91 m.p.h., 3 hrs. 2 mins. 42 secs.
6. Kaye Don (2,336 c.c. Alfa-Romeo), 85.46 m.p.h., 3 hrs. 3 mins. 39 secs.
7. John Cobb (2,336 c.c. Alfa-Romeo), 85.45 m.p.h., 3 hrs. 3 mins. 40 secs.
8. C. J. Dodson (1,087 c.c. M.G. Magnette), 84.87 m.p.h., 3 hrs. 4 mins. 56 secs.
9. N. Black (1,087 c.c. M.G. Magnette), 84.36 m.p.h., 3 hrs. 6 mins. 3 secs.
10. E. R. Hall (1,087 c.c. M.G. Magnette), 82.55 m.p.h., 3 hrs. 10 mins. 8 secs.
11. C. E. Martin (1,087 c.c. M.G. Magnette), 82.37 m.p.h., 3 hrs. 10 mins. 32 secs.
12. A. Esson Scott (1,990 c.c. Bugatti, unsupercharged), 81.77 m.p.h., 3 hrs. 11 mins. 37 secs.
13. C. Penn-Hughes (1,087 c.c. M.G. Magnette), 81.00 m.p.h., 3 hrs. 13 mins. 46 secs.
14. C. Brackenbury (747 c.c. M.G. Midget), 78.88 m.p.h., 3 hrs. 18 mins. 58 secs.
15. T. V. G. Selby (1,990 c.c. Bugatti, unsupercharged), 78.34 m.p.h., 3 hrs. 22 mins. 3 secs.
16. T. S. Fothringham (1,930 c.c. Singer, unsupercharged), 77.22 mp.h., 3 hrs. 23 mins. 15 secs.
17. R. H. Eccles (1,087 c.c. M.G. Magnette), 76.90 m.p.h., 3 hrs. 24 mins. 5 secs.

GROUP PRIZE WINNERS.

Group 3 (over 1,750 c.c., supercharged).
Whitney Straight (Maserati), 89.62 m.p.h.

Group 2 (1,750 c.c. supercharged and over 2 litres unsupercharged).
C. J. Dodson (M.G. Magnette), 84.87 m.p.h.

Group 1 (up to 750 c.c. supercharged and 2 litres unsupercharged).
C. Paul (1,633 c.c. Riley), 86.05 m.p.h.

TEAM PRIZE.

Bugatti Team: Earl Howe, T. E. Rose-Richards and A. Esson Scott.

Prize for Best Performance by All-British Car.
C. J. Dodson (M.G. Magnette).

ROLLS-ROYCE

The Best Car in the World

"Yet the Continental Phantom II has a performance which puts to shame that of most so-called 'speed models'. At the same time it has the ghostly silence and silken smoothness that for thirty years have been the characteristic of Rolls-Royce products. That sleek saloon which draws up so silently at the kerb may in the next half-hour be devouring the miles at a prodigious rate as its long bonnet heads for Scotland and the North."

Independent, 31st March 1934

R. A. F. Display *Hendon, June 30th*

ROLLS-ROYCE LIMITED

14-15 Conduit Street London W1

Telephone Mayfair 6201

FOREIGN TOURING

By
T. G. MOORE.

DURING the past few years many more motorists from the British Isles have been sampling the roads of the Continent than used to be the case, but there is still a feeling that something unusual in the way of preparation is required before a journey of this nature may safely be undertaken. The following notes based on personal experiences may be of use to those who contemplate taking their cars to the Continent.

First of all as to the documents required. The principal ones are the International Driving Permit and the Triptique or Carnet. The first is issued by the R.A.C. or A.A. after a short driving test, and costs 10s. 6d., and each person who proposes to drive must have one. The two motoring bodies have examiners in most of the big towns.



In Central Switzerland. Good roads now make this scenery accessible to motorists.

The Triptique or Carnet are alternative documents, the first permitting the car to be taken into the countries for which it is issued, while the latter allows the motorist to travel in all countries of Europe except, I think, Russia. The Carnet is slightly more bulky, but since it covers practically everywhere in Europe it is to be preferred, unless one definitely decides to confine the tour to one country.

The two above-mentioned bodies also issue the triptiques, or carnets, and a deposit varying with the country through which it is proposed to travel has to be deposited. Actually only £30 in cash is required, the remainder being in the form of an insurance policy or banker's guarantee, and based on the duty of the country which has the highest tariff. With one of these documents, passing from one territory to another is a matter of the greatest ease. On entering the new country a perforated strip, carrying particulars of the car is torn out of the book, and the counterfoil is stamped and signed by the customs officer, and the same ceremony takes place on leaving it. There is nothing to be watched for except making sure that both signature and stamp are there, otherwise there may be some difficulty when bringing the car back to England. The title of International Registration Book is self-explanatory. The fiscal permit is a fairly recent introduction which allows a car to be driven in Italy and several other countries without paying the circulation tax.

In France, of course, the petrol tax is the only impost which is now levied on cars.

A fee of £3 is charged for issuing these documents, and included with them is a Continental handbook of hotels, and the necessary G.B. and identification plates for the car.

Passports will, of course, be required, and these can also be obtained by the motoring bodies. It is wise to verify that the list of countries inscribed in the passport includes all those to which a visit is contemplated, while supplementary visas are required for most of the Balkan and Baltic states.

Time will be saved, and money, too, owing to the unfavourable exchange abroad, by buying maps before leaving England. For France there is little to choose between the Michelin and the Taride series, with scales respectively of 3 and 4 miles to the inch, but for a straight run on main roads the single-sheet map of France published by Michelin at 6s. is probably sufficiently detailed. For Germany the atlases published by the Continental Tyre people are widely used, while the series issued by the Viennese firm of Freytag and Berndt are almost the only accurate ones covering the Balkans.

Italy is well served by the Touring Club Italiano which publishes maps in all scales, while Switzerland features in the lists of all the publishers. The Automobile Association keep a large stock covering all requirements.

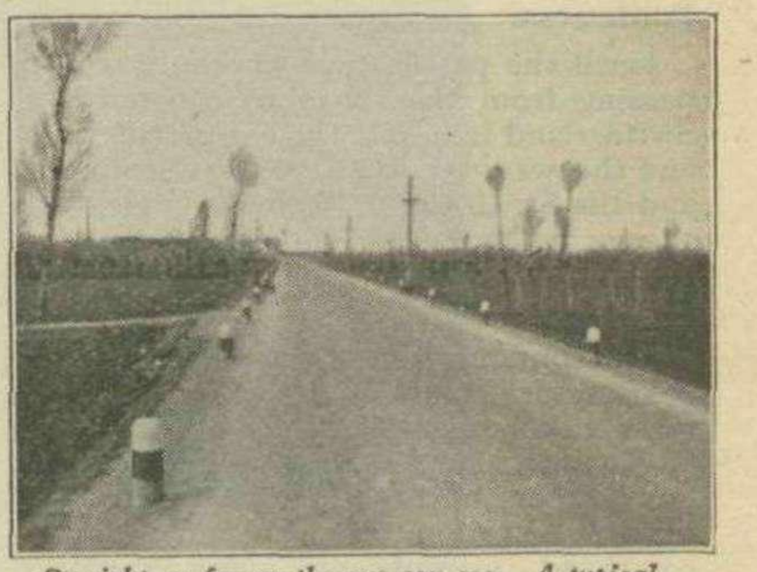
Any normal car is suitable for touring in Europe, provided that it is given the same preliminary attention which a similar trip in England demands. The engine should be free from carbon, the valve clearances should be checked up and a spare coil should be carried. Spare plugs, a new valve and springs, and an assortment of nuts and bolts with English threads are worth taking, and it is wise to check over the cooling system and the fan belt if the car is to be used in mountainous country. The sump should be drained and refilled with fresh oil, and if the car has any special fads in the way of oil, a two-gallon tin may be carried on the running-board. All-night petrol stations are the exception abroad, and I have several times been glad of a two-gallon tin of petrol, also carried outside the car.

The tyres should be replaced if they seem likely to give trouble, for with the popularity of super-balloons English sizes are often difficult to get. All chassis nuts should be tightened up, and a stone-guard on the bottom of the petrol tank is advisable on many cars.



The road to the St. Gothard Pass. Snow still lingers in the fields on each side.

The automobilist travelling to France is nowadays well catered for by the Townsend Ferry, which runs from Dover to Calais. The cars are carried on the lower deck, while there is comfortable passenger accommodation above. Furthermore one does not have to arrive there until 10.30 a.m., which makes it possible to drive down comfortably from London in the morning. The "Autocarrier," the Southern Railway steamer, which runs in the summer from Dover to Boulogne, and leaves at 11 a.m., is equally convenient. It is worth remembering that petrol tanks need not be drained on these



Straight as far as the eye can see. A typical road across the Plain of Lombardy.

steamers, and since petrol is at least twice as expensive in France as in England, it obviously pays to start with a full tank.

One of the cheapest ways of reaching Germany, by the way, is to go from Harwich to Antwerp. The journey is made by night, and avoids the rather tedious run over pavé roads through Northern France and Belgium.

French main roads are famous for their long straight stretches, but somehow one's average speed is not as high as would be expected. For one thing, they are often badly corrugated, which makes things uncomfortable on a small car, and they are not particularly wide. French lorries, most of them Diesels, are only exceeded in width by those one finds in Italy, and often the English driver has reason to be thankful for his right-hand steering, which allows him to take his car safely well down the camber. Most of the towns are still paved with stone setts, and the sound of bumpers clashing like cymbals in every town in Central France becomes rather irritating. Over the 800-mile run from Boulogne to Monte Carlo, which I have done several times lately, the only sections which caused any real discomfort was some of the roads around Aix-en-Provence.

Under the Fascist régime, the roads of Italy have been vastly improved. Apart from a stretch near the French frontier, they are splendidly engineered from Ventimiglia right on to Genoa, though the town itself has some very inferior patches.

Over the Pontedecimo Pass to Milan the roads are equally good, from Bologna

FOREIGN TOURING—continued

to Florence and Rome, the route of the Mille Miglia, the road winds up and down magnificently over the various ranges of the Apennines and is well graded and surfaced, with guard-rails and posts at dangerous points. Tarmac is the general rule, but concrete roads are used to some extent in the Plain of Lombardy, and "Periculo di Slittamento" notices give warning of their condition in wet weather.

I was not very much impressed by the Autostrade, which are only about 50 feet wide, with a tarmac surface. However, they do not carry much traffic, and since all other roads pass either over or under them, one can maintain an average of 60 m.p.h. without exceeding 70.

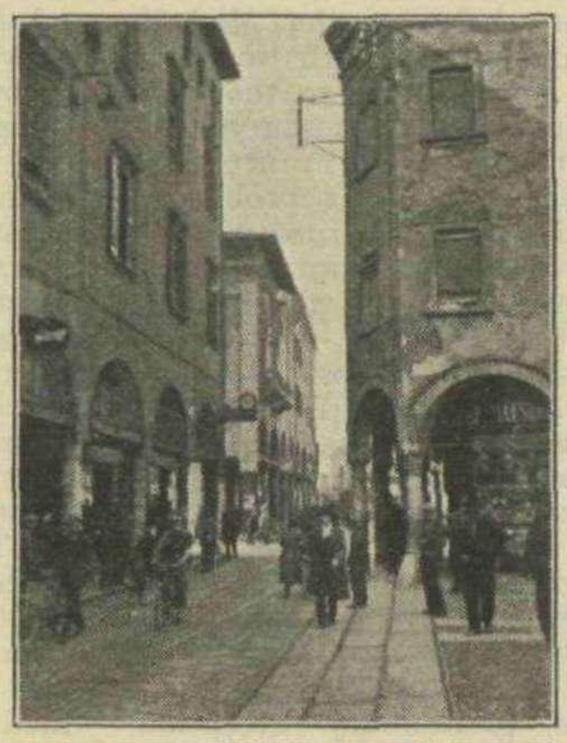
When last in Italy, I decided to return to England via Switzerland, and entering the latter country at Como, found the road far from prepossessing, and in the villages it is sometimes only wide enough for a single car. However, I learnt that the main road was through Varese and Pontetresa.

Until the passes open the only way of passing from the south to the north of Switzerland is to put the car on the train, and this service is available for the Simplon and the St. Gothard Tunnels. The total charge for taking a Talbot car and two passengers by either route worked out at about 40s.

The configuration of the country makes it necessary to build the roads in most cases either along the sides of mountains or along the lakes, and consequently they are rather narrow, but are perfectly suitable for ordinary touring and, of course, command magnificent views. Switzerland is probably at its best in the early summer, and by going at this time one avoids the crowds of tourists who abound at many of the centres in August and September.

A survey of roads would be incomplete without some reference to Germany. My experience of them has been varied, but generally they seem rather rough in the North, but well-graded and in good condition in the Black Forest and other districts which appeal to the tourist.

Although hotel-keepers on the continent have, in many cases, made concessions for foreign tourists, the unfavourable exchange makes hotel accommodation a serious item in the expenditure. The Autocheque system is useful because one knows the outside cost of this item before starting the trip, and even the "C" class hotels where, dinner, bed and breakfast costs 15s. were clean and comfortable in every case where I have tried them.



[*Motor Sport Photographs*
A Street scene in Mantua. As the birthplace of Nuvolari it has a special significance for Italian Sportsmen.

A final and less cheerful word on the price of petrol. The Anglo-American Oil Co. have depots everywhere at which Esso, which is more or less equivalent to Ethyl in England, can be bought. The price of this is so high in many places that I tried the No. 1 spirit, which is called "Standard," and though my Talbot has a compression of 7 to 1 this fuel proved quite satisfactory for ordinary fast driving. Benzol can be bought in most places in France at the price of Esso but is not always clean. Shell Dynamin, which has the same price and characteristics as Esso, is now available in most of the towns. Here is a list of the prices per gallon I encountered :—

Esso ... France 2/10d. to 3/1½d.
Italy 3/3½d.
Switzerland 2/5d.
Germany 3/0d.

Standard France 2/9½d.
Italy 3/0d.
Switzerland 2/2d.
Germany 2/9d.

Oil costs from 11/0d. to 13/0d. per gallon.

Sometimes I ask myself what is the attraction of touring abroad, since it is obviously more expensive than a similar expedition in England. Apart from the interest of seeing car races in countries which understand them, which is a sufficient excuse for many people, there is also a spice of adventure and novelty in seeing new scenery, hearing new languages, eating a new kind of food which appeals to most people, and the fact that one can drink the final larger at 11 p.m., instead of at 10, if so inclined, cannot help appealing to the Englishman's love of freedom, now so severely circumscribed in England by the offspring of Dora.

NO ENTRY FEE IN KLAUSEN HILL-CLIMB

After a year's interruption, the Klausen Hill Climb has been revived, and entries will be confined to invited drivers. There is no entry fee, though if the cars fail to materialise they must pay a fine of £6!

The first prize is £60 and a cup, and there are four racing car classes and six for sports cars, with three prizes in each class, totalling £2,000.

The course measures 13½ miles in length, well sprinkled with hair-pins, and involves a climb of nearly 4,000 feet. The event is held on Sunday, August 5th two days before the commencement of the Alpine Trial. Those who wish to take part should get in touch with the Organising Committee, Waissenhausstrasse 2, Zürich, Switzerland.

TEN YEARS OF MOTORS AND MOTOR RACING

By **LT.-COL. CHARLES JARROTT,** *the famous Pioneer Racing Motorist.*

"... A book which everybody who is in the least interested in motor racing should obtain at once. It is a revival of that old, famous and well illustrated book, practically the first of its kind, by Charles Jarrott, which remains one of the finest books on motor racing that has ever been written." —THE AUTOCAR.

PRICE 3/6 (*Post free 6d. extra*).

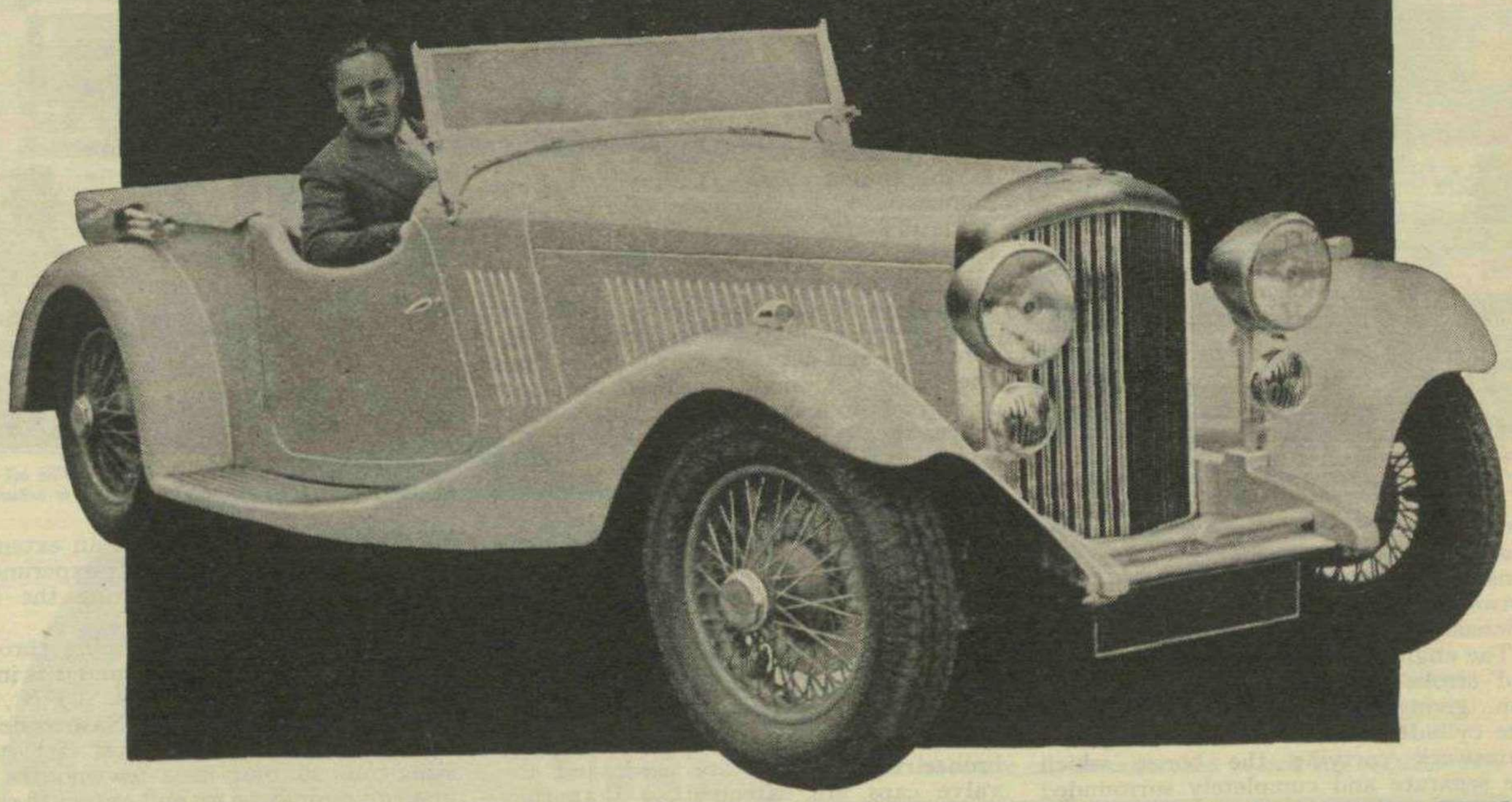
MOTOR SPORT (1929) Ltd., 39, Victoria Street, London, S.W.1

Used and recommended by

BENTLEY

for

"the silent sports car"



PRICE'S MOTORINE

THE OILIER OIL

Bentley, makers of sports cars world-famed for their craftsmanship and *silent* speed, use and recommend for their wonderful engines, Price's Motorine. For sports cars of every make where the last ounce of engine efficiency counts; for smooth silent power and long engine life, use Price's Motorine — the oilier oil that costs no more than other high grade oils.

● PRICE'S, BATTERSEA, LONDON, S.W.11

105

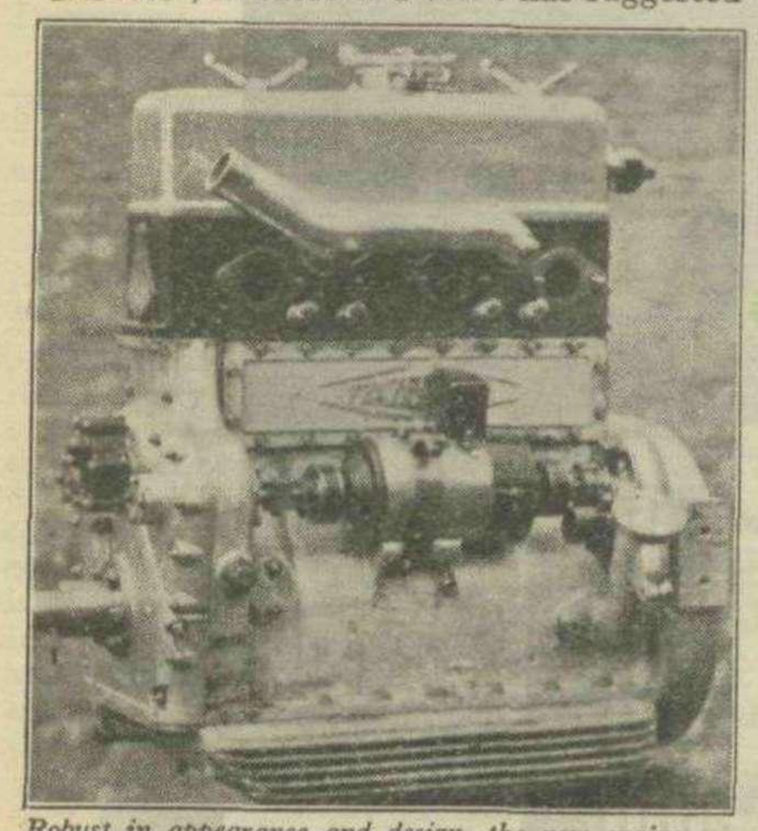
Please mention MOTOR SPORT when corresponding with advertisers.

THE ENTHUSIAST'S IDEAL

A New 1½ Litre Engine built specially for Fraser Nash.

UNIQUE in its all-chain transmission with its lightning gear change and high power-weight ratio, the marque of Fraser-Nash has found particular favour with the hard driver. On cars of this type, the owners are constantly demanding more and more power and with the aid of the special deflector cylinder-head the power output of the O.H.V. push-rod Meadows engine, which has been the standard power unit for the past two years, has been raised to over 60 h.p. on petrol-benzol.

Any further progress could only be made by building an entirely new engine, and in deciding upon the final lay-out the latest developments in design and materials for high-efficiency engines have been used, while the practical experience of Mr. H. J. Aldington, the Managing Director, in races and trials has suggested



Robust in appearance and design, the new engine is constructed for high performance. Note the quick oil-filler on the cam-case and the heavily ribbed sump.

further detail refinements. A single overhead camshaft four-cylinder engine was considered to offer the best compromise between strength, light weight and efficiency.

The engine is a four-cylinder with bore and stroke respectively of 69 and 100 mm., giving a total capacity of 1,496 c.c. The cylinder block is little more than a framework carrying the bores, which are separate and completely surrounded by water. The sides of the block are sealed by aluminium covers. The lower part of the barrels fit down into the aluminium crank-case and the pistons can be removed from the bottom end without disturbing the block.

The water pump is carried at the rear end of the unit and forces water round each of the main bearing housings through ducts cast in the crank case, from which it is led upwards to the cylinder-block.

The crank-case is an immensely stiff box-like structure, with numerous studs to secure the timing cover. The nitralloy hardened steel crank-shaft is carried in three steel-backed main bearings, and is fully balanced. The journals are 2⅜in. in diameter. The weights, in each case, are secured to the webs by two bolts on the sheer, and the big-end journals are bored out to improve heat-dissipation. Oil is forced to the three main bearings, and is led through the hollow shaft to the big-ends, the centre ones receiving their supplies from both sides.

Steel connecting rods are used and the white-metal big-end bearings are cast direct into the rod. Research has shown that under stress the outer edges of plain bearings tend to open up, so that only the centre part remains in contact with the shaft, and to combat this strengthening rings of metal are left round the outside of the caps. The oil-holes in the journals are arranged slightly after top dead centre, so as not to be blocked when the maximum thrust takes place.

The Aerolite pistons are made of "Y" aluminium alloy, with two compression rings and one slotted scraper, and weigh only 12oz. each. The skirts are slit for some distance, and have shallow vertical grooves which take care of expansion. The gudgeon pins float in the pistons and the small-end bushes.

A four-sprocket chain drive is used to drive the two auxiliary shafts and the oil pump.

This latter is mounted on the outside of the timing case and draws its supplies from the finned and ribbed sump, which holds two gallons, through a duct cast in the timing case. The main feed, of course is led to the main bearings, but ducts are also provided to lubricate the magneto drive and dynamo drive bushes, all under full pressure.

The cylinder head of the new Fraser-Nash engine is of most substantial construction, and actually weighs more than the block. A single overhead camshaft is carried in four plain bearings, and is driven by a double roller chain at the front end.

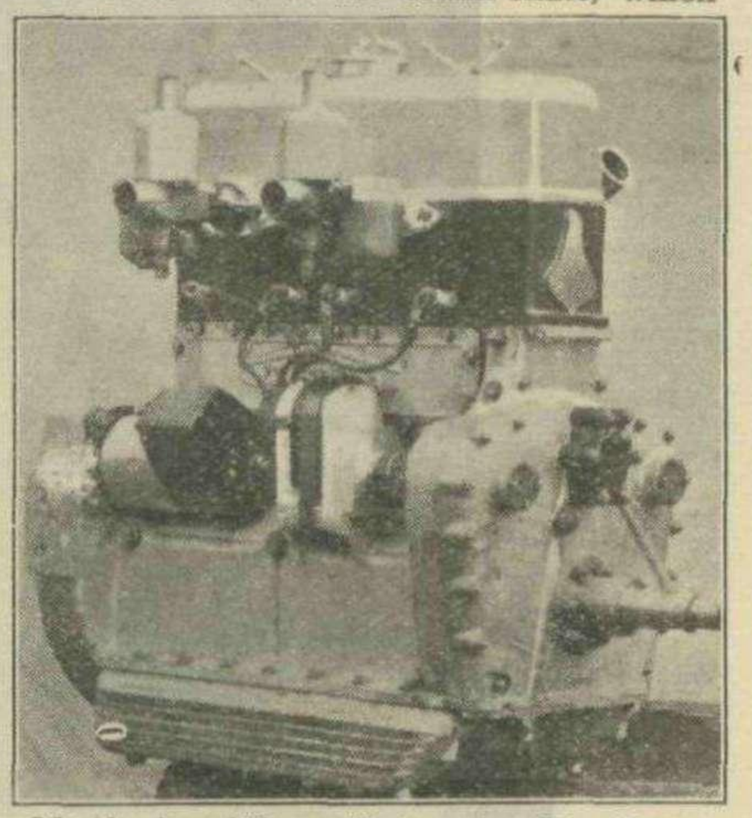
This chain is interchangeable with the one used for the timing gear and has suitable spring-loaded tensioners. Pegs on the sprocket and a flange on the camshaft give a vernier adjustment of timing in steps of 1¼ degrees. The valves are mounted vertically in the head with a finger interposed between each cam and its valve. These fingers can be moved aside against springs to facilitate the removal of the valve cups. Aluminium bronze valve guides are used, and the valve caps are extended so that they slide over them, providing a seal at all times. The valves are threaded and the clearance is adjusted by rotating the cap and locking it with a screwed nut. The camshaft is hollow and oil pumped up to the front bearing is carried to the others and also escapes through holes on to the working surfaces of the cams.

Each combustion chamber is circular in plan view, with a lobe projecting into it from either side. This "deflector-head," which has been used with success on the Meadows engines fitted during the last six months, gives good turbulence, and permits of a high compression without pinking. Two sparking plugs per cylinder are used, with coil and magneto ignition, and they fire the mixture through screened holes of reduced diameter so as not to disturb the turbulence The inlet valves are 1½in. in diameter and the exhaust valves 1⅜ in., both being made from K965 steel.

Two S.U. carburetters are used, and the starter, dynamo, and magneto are of Bosch manufacture.

A large quick-action oil-filler is fitted to the cam-case, and the rev-counter drive is taken from the rear of the cam-shaft.

In spite of its massive appearance the new engine only weighs 325 lbs. or about 15lbs. more than the Meadows. All the parts have been built with an ample margin of safety and should be capable of withstanding 150 h.p. which figure. would probably be reached if the engine were fitted with a large supercharger. If this were used it would be driven off the front end of the crank-shaft, which



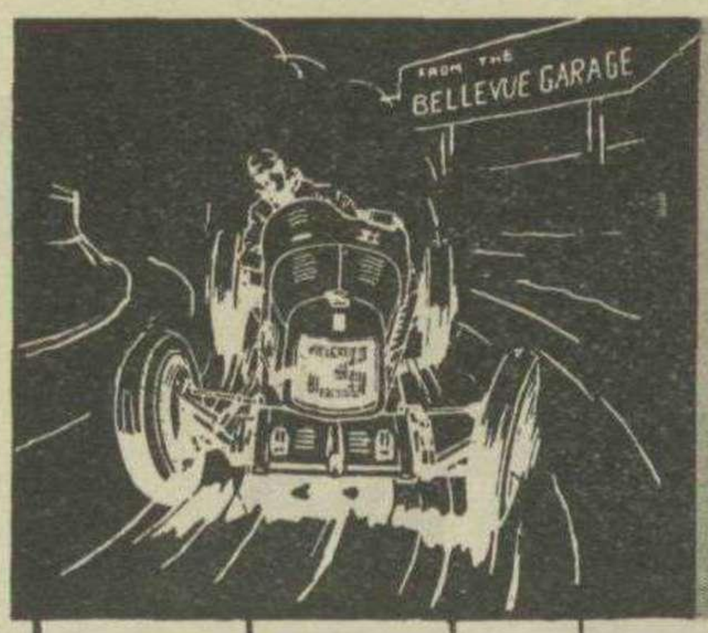
Off-side view of Frazer-Nash engine. The oil pump is mounted on the timing case, which is secured by numerous studs.

would be a special job with an extended front end, but for the present experiments are being confined to getting the best out of the unblown engine.

The new engines are coming through at the rate of one per week, and it is interesting to note that Messrs. A.F.N., the proprietors of the Fraser-Nash concern, have taken over the Anzani factory at Kingston, so that in a few months the new engine may be manufactured there.

The latest Fraser-Nash cars differ in several respects from last year's models, the most important being of the standardisation of the 9ft. chassis for the two-seater car in place of the 8ft. 6in. type formerly used. The increased length makes the cars steadier on corners with loose surfaces, and in conjunction with a new type of road spring made by Woodhead the cars are extremely comfortable on bad surfaces The chassis has been extended rearwards to carry the petrol tank, and the section of the chassis members has been increased. The centre cross-member now passes under the propellor shaft and this and the clutch may be withdrawn with the minimum of dismantling.

The all-chain transmission, with its



BELLEVUE GARAGE & SERVICE STATIONS LTD.

AGENTS FOR

MG

and

Austin

Cars

Director and Manager DENIS G. EVANS

APPOINTED GARAGE

Every mechanic on our staff has had long experience in the tuning of cars for reliability trials, track and road racing. Our long list of racing successes during 1933 fully endorse their abilities in this important phase of motoring activity.

We shall be delighted to advise you and submit our estimates free.

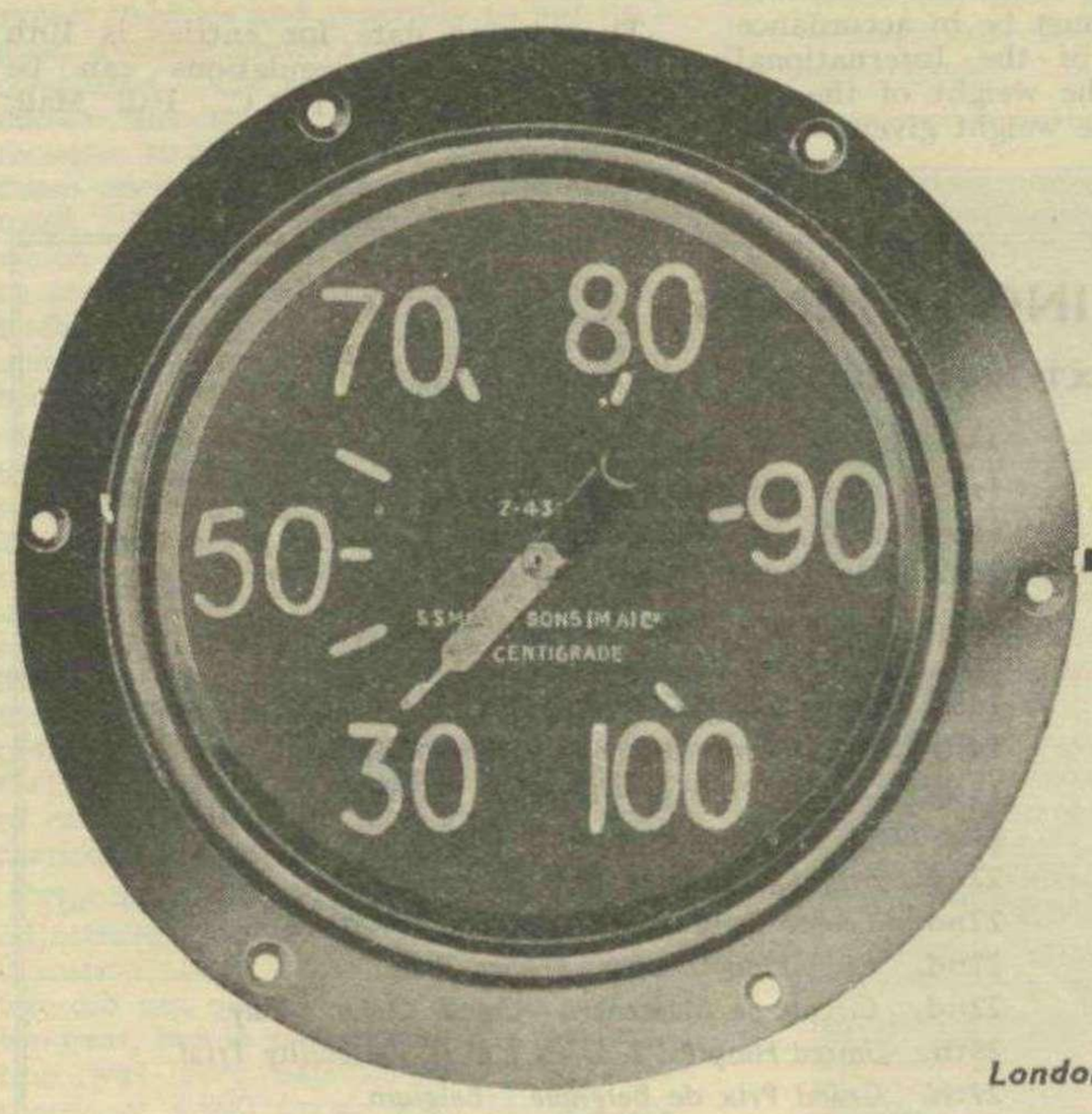
We tune and supply any make of car, and offer liberal amounts for cars taken in part exchange. Deferred terms can be arranged.

Every kind of repair to chassis and coachwork undertaken.

Telephone BATTERSEA 0479

18-19 BELLEVUE ROAD. WANDSWORTH COMMON S.W.17.

Special Instruments for the Racing and Sports motorist



Revolution Indicators	Air or Fuel Pressure Gauges
Oil Pressure Gauges	Supercharger Gauges (vacuum and pressure)
Water Thermometers	etc., etc.
Oil Thermometers (As illustrated)	

All the above can be calibrated to suit any requirement.

Whitney Straight cabled us as follows:—
"SMITH'S ACCESSORIES FITTED WINNING CAR INTERNATIONAL TROPHY RACE GAVE COMPLETE SATISFACTION."

SMITH'S

London Showrooms: 179/185, GREAT PORTLAND STREET, W.1

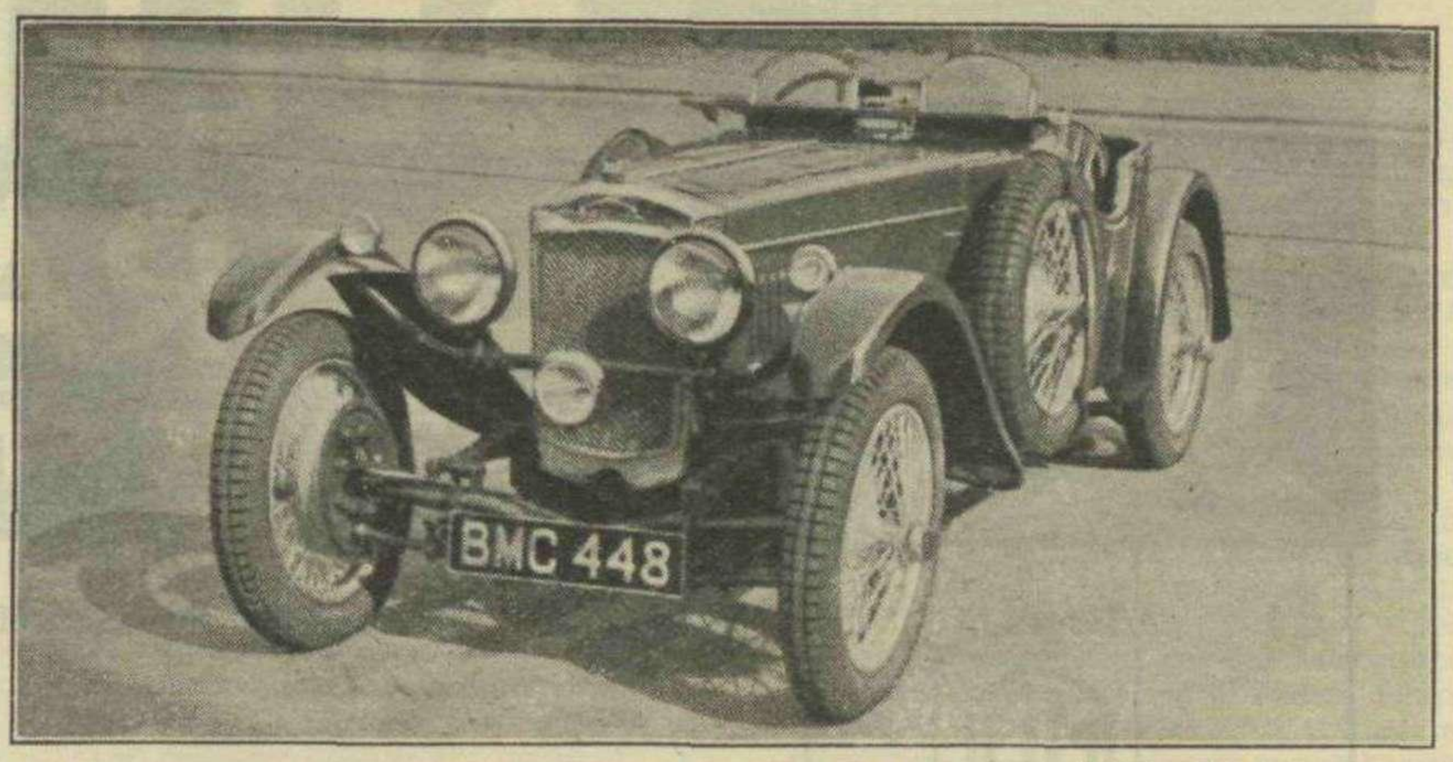
S. SMITH & SONS (Motor Accessories) LTD., CRICKLEWOOD, LONDON, N.W.2

Please mention MOTOR SPORT when corresponding with advertisers.

THE ENTHUSIAST'S IDEAL—continued.

silent direct drive on all ratios is naturally retained, but the bottom gear sprockets are now on the off-side instead of in the middle. This brings the back-axle sprocket in close proximity to the off-side bearing, and avoids the possibility of straining the axle through the heavy torque on bottom gear.

The price of the finished cars varies according to the type of engine and equipment required. The basic price of the two-seater car fitted with a two-carburettor Meadows engine is £475, while a de-luxe addition with outside exhaust system, telecontrol shock absorbers, and a number of other refinements costs £50 more. In the same way the two-seater fitted with the six-cylinder double-camshaft engine, either of 1,500 c.c or 1,657 c.c. costs £570, or with the extras £620. The Colmore three-four cars cost in each case £20 more than the corresponding two-seaters. It is interesting to note that all the latest bodies, which have particularly satisfactory lines, are being made at the Frazer Nash Works.



[*Motor Sport Photograph*

An increased length of bonnet on this long-chassis Frazer Nash adds to its Sporting lines.

THE ALPINE TRIAL, 1934

THE R.A.C. has been able to obtain a certain amount of advance information regarding this year's Alpine Trial.

The Trial will start from Nice on Tuesday, 7th August, the two previous days being occupied with the examination of the cars. The first day's run will be from Nice to Aix-les-Bains, 485 kms.; the second from Aix-les-Bains to Interlaken, 421 kms.; the third from Interlaken to St. Moritz, 371 kms.; the fourth from St. Moritz to Venezia, 549 kms.; the fifth from Venezia to Zagreb, 436 kms., and the sixth from Zagreb to Munich, 616 kms.

Only cars manufactured in series will be allowed to compete. The words "Manufactured in series" mean that cars so constructed shall have been part of the normal and continuous output of the factory prior to 1st May, 1934, and that at least one hundred of the type in question shall have been completed before 1st August, 1934. Each entrant must add a declaration to his entry, stating that the car complies with this condition, that no alterations have been made to the chassis or engine, and that no additional fittings have been built into the car. In the case of British entries, this declaration must be examined by the R.A.C., verified and confirmed.

Bodies must have a minimum number of two seats and must be in accordance with Article 247 of the International Sporting Code. The weight of the car must agree with the weight given in the catalogue.

There will be two speed tests with flying starts; one on the Col du Galibier on the first day, and the other on the Stelvio on the fourth day. There will also be a speed test run on the flat over a distance not exceeding 10 kms., on a day not announced. For each test a minimum speed is set and failure to attain that speed will result in loss of marks. There will be no bonus marks for exceeding it.

At the conclusion of the Trial the cars will be examined to see that all seals and marks are intact, but there will be no examination for condition.

The closing date for entries is 10th July, 1934, and regulations can be obtained from the R.A.C., Pall Mall, London, S.W. 1.

FORTHCOMING EVENTS

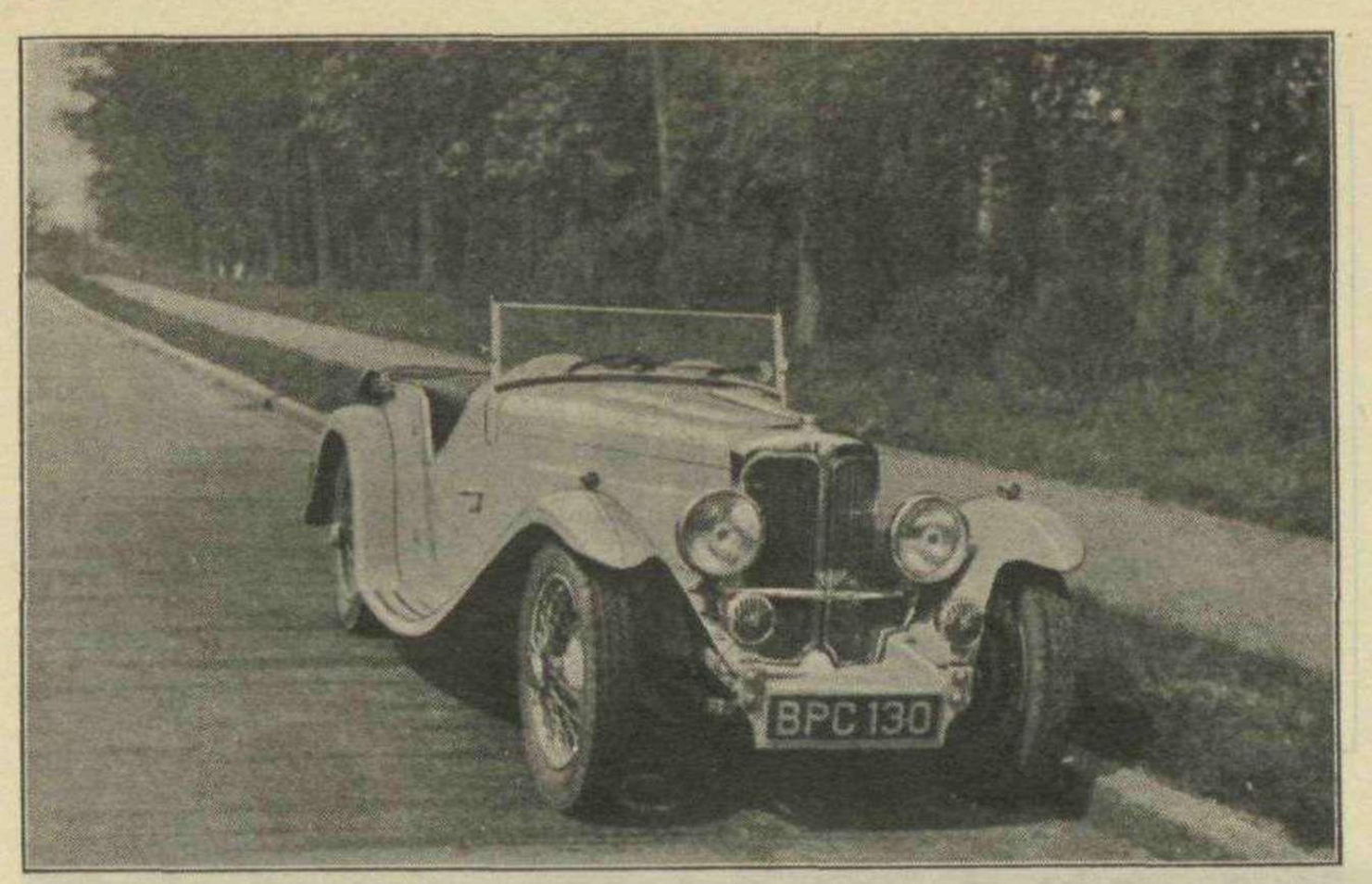
MOTORING FIXTURES FOR 1934.

JUNE.

2nd. *Southport M.R.C. Sand Race Meeting.*
3rd. *Course de Cote de Sezanne. France.*
3rd. *Internationales Eifelrennen. Germany.*
5th. *Grand Prix de Lwow. Poland.*
9th. *M.A.C.-Shelsley Walsh Hill Climb.*
9th. *M.G. Car Club Night Trial.*
10th. *Royal Prix de Rome. Italy.*
16th-17th. *Le Mans 24 Hours Race. France.*
16th-17th. *Tour de Alpes Autruc Lionnes.*
16th-17th. *Brighton and Hove M.C. Brighton-Beer Trial.*
17th. *J.C.C. Derbyshire Trial.*
17th. *Internationales Kesselbergrenen. Germany.*
17th. *Grand Prix Pena Rhin. Spain.*
17th. *Pontedecimo Giovi. Italy.*
22nd-23rd. *Riley Motor Club. 24 Hour Trial.*
23rd. *B.R.D.C.-B.E. Trophy.*
23rd-24th. *Liverpool M.C. Reliability Trial.*
24th. *Circuit de Lorraine. France.*
30th. *Sutton Coldfield and N. Birmingham A.C. Vesey Trial.*
30th. *J.C.C. Members' Day, Brooklands.*

JULY.

1st. *Grand Prix de L'A.C.F. France.*
6th-7th. *M.C.C. Reliability Trial.*
7th. *B.A.R.C. Inter Club Meeting.*
8th. *Course pour Voitures de Seme.*
8th. *Grand Prix de la Marne.*
14th. *Derby & D.M.C. (Prop.) Ltd. Race Meeting Donington.*
14th-15th. *Women's A. & S.A. Reliability Trial.*
15th. *Grosser Preis of Germany. Germany.*
21st-22nd. *2,000 Km.-Fahrt. Germany.*
22nd. *Brighton & Hove M.C. Drewitt Trial.*
22nd. *Course de Cote du Gaisberg. Austria.*
22nd. *Circuit de Dieppe. France.*
22nd. *Circuit de Montenero—Coppe Ciano. Italy.*
28th. *United Hospital & U. of L.M.C. Reliability Trial.*
29th. *Grand Prix de Belgique. Belgium.*
29th. *Course de Cote de Poetschen. Austria.*



THE 16-66 A.C.

A FAST SPORTS CAR WITH UNIMPEACHABLE MANNERS.

"LE poids, c'est l'ennemi" is the slogan of a famous Continental firm specialising in small cars, and the makers of the A.C. Ace have borne this fact in mind when settling the specification of their sports model. Fitted with a small but comfortable four-seater body and an efficient two-litre engine, the "16-66" is one of the liveliest and yet one of the most effortless medium-weight cars we have handled.

From the minute that one takes the steering wheel, the car seems eager to thread its way through traffic, to overtake slower vehicles and generally to put up a good average under rather unfavourable conditions. The good power-weight ratio allows this to be done without much recourse to the gears, but when required these operate with certainty and refinement. A useful feature is the way in which the lever can be clicked from top to second gear when running slowly in traffic. Top gear is "forward right" instead of "back right," but one soon becomes accustomed to this.

For some reason not easily apparent the springing of the A.C. did not seem to suit the rougher parts of Brooklands Track, but few of its owners would want to use it there, so this is not an important matter. With the windscreen down the car achieved the useful timed speed of 80 m.p.h. over a half-mile, and a comfortable 75 in the raised position. Straight petrol or benzol mixture is the normal fuel, but since there was a fair amount of carbon in the engine, the tests were carried out using Pratt's Ethyl.

The crank-shaft damper was out of adjustment, and there was considerable vibration above 4,000 r.p.m. We therefore did not exceed these revs. except on top gear, but in spite of this the acceleration was very satisfactory. The road speeds at 4,000 r.p.m. were 74, 54, and 35 m.p.h. respectively. The speedometer was dead accurate.

Brief Specification.

Engine : 6 *cylinders*, 65 *mm. bore*, 100 *mm. stroke, capacity* 1.991 *c.c. Tax* £16. *One overhead camshaft. Coil ignition. Three S.U. carburetters.*

Gearbox : Four speeds and reverse. Constant mesh third gear. Ratios 4.66, 6.4, 9.3 *and* 17.7 *to* 1.

Central change with remote control.

Brakes : Bendix duo-servo.

Dimensions : Wheelbase 9*ft.* 7*in., track* 4*ft.* 2*in., weight with open* 4*-seater body* 20¾ *cwt.*

Price : £450.

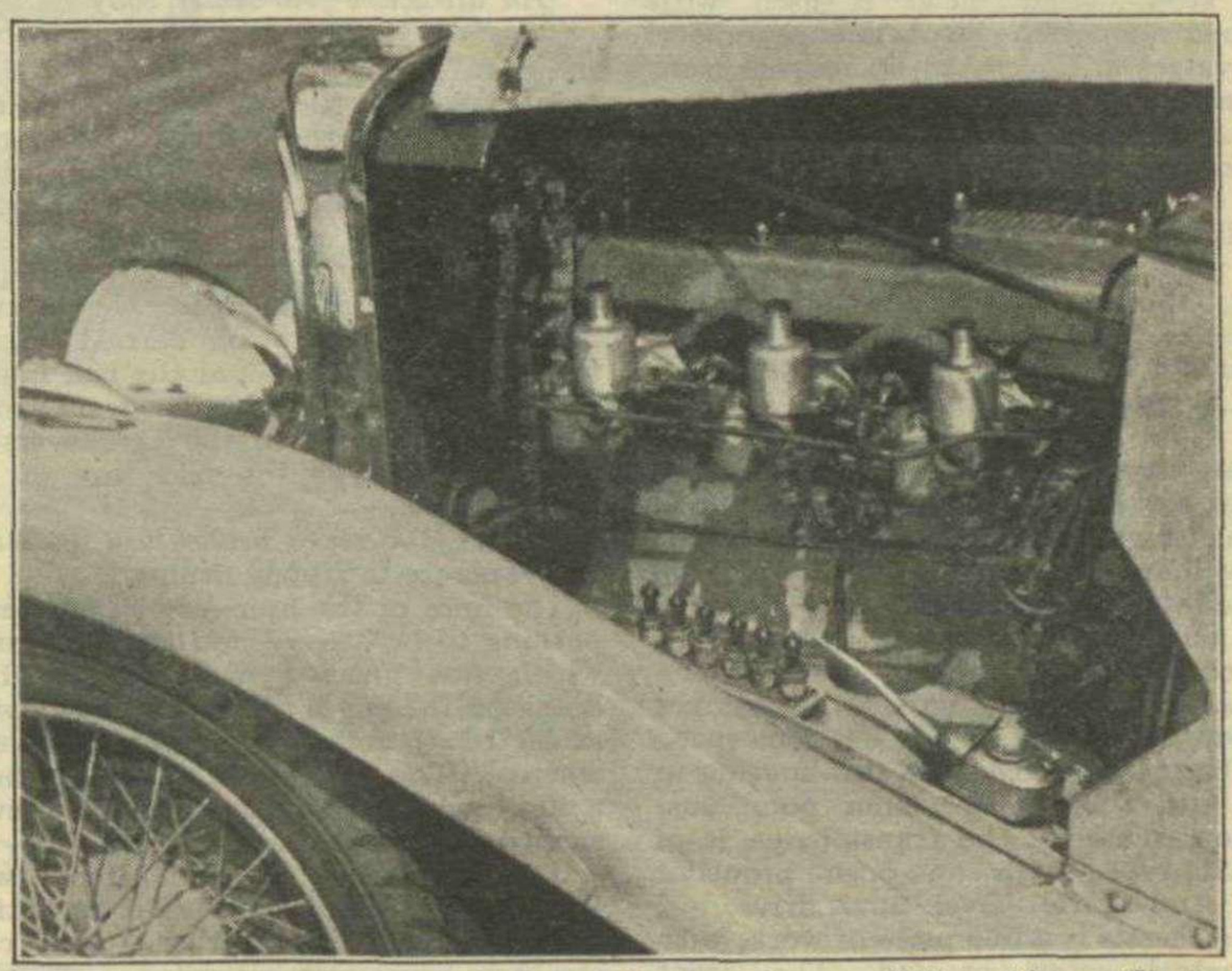
To get good road holding at high speed it was necessary to have the tyres and shock-absorbers rather hard, but this does not make driving uncomfortable, as the driving position is a good one and the upholstery gives support where needed. Top gear is fairly low, and for fast runs on main roads little gear-changing is required. The engine runs quietly, with a subdued exhaust note, and full throttle can be given without the driver feeling that the car is working hard.

If there is occasion to hurry, the car maintains a steady 70 m.p.h. without effort and takes fast curves in good style, and 65 can be held up Dashwood, Benson and other main road hills with gradients round 1 in 10. Third gear is useful, and when the vibration damper is properly adjusted one can get some 60 m.p.h. at 4,500 r.p.m. The car was driven about a hundred miles practically flat out and seemed to enjoy it, the only complaint being that the cockpit became rather warm. This will be overcome on later models by fitting scuttle ventilators.

The tourist as well as the fast driver is catered for and the car is almost inaudible cruising from thirty to fifty miles an hour. It will run at under ten miles an hour on top gear without snatch, though the simple gear-change generally encourages changing down at an earlier stage. Hand and automatic ignition control is fitted, and the lever never needs to be touched except for starting.

The driving position brings all controls within easy reach, and the steering wheel is well placed for fast motoring. The steering itself is light without being low-geared, but we should have preferred a little more caster. The body is cut away to clear the driver's elbow, and the body is wide enough to allow the arm to be kept inside in wet weather.

The clutch is light and takes up the drive smoothly, but when fully depressed for getting away from a standstill, the foot-plate takes up an awkward angle. The gear-box, which has a remote control lever, is particularly good and there is



The A.C. engine is notable for its clean design and the accessibility of its auxiliaries.

THE 16-66 A.C.—continued.

a real satisfaction in handling it, apart from the usual enhanced performance which one gets by a judicious use of the "indirects." Third gear, which employs constant-mesh pinions, runs quietly and is close to top gear, and second, which is generally used for starting on the level, is almost as silent as third gear.

The brakes were progressive in action, with plenty of power as the pedal was fully depressed, but on the car we tested the front ones came on too early. This could have been rectified if it had been realised that the latest Bendix brakes can be adjusted by a simple hand control on each back-plate, but under the circumstances 66 ft. was required from 40 m.p.h.

As will already have been gathered, the special feature of the A.C. car is that even when driven hard there is no sensation of stress or overdriving, the silence and smoothness of the engine contributing largely to this, and the power-weight ratio is favourable enough to make one think that a higher back-axle ratio would further extend the performance. With a higher compression and a high-lift camshaft, in fact, the A.C. might well show to advantage in such races as the Belgian Ten Hour, or the Ulster T.T.

The A.C. Company were the pioneers of the Light Six engine, and the latest models retain some of the features which were so revolutionary in 1924.

The cylinder block and the top of the crank-case form a single aluminium casting, with hardened steel liners completely surrounded by water. Owing to the disposition of the crank-shaft bearings the liners are grouped in three pairs, each pair being sealed at its lower end by a gasket shaped like a figure-of-eight, while a single gasket is used at the top end. This form of construction brings with it an important saving in weight, and the complete two-litre engine only scales **325** lbs.

The crank-shaft has four bearings, and a damper is incorporated in the flywheel. Plain bearings are used for the mains and the big ends.

A steel cylinder-head is used with inclined valves in hemispherical chambers. The valves are operated by rockers from a single overhead camshaft which is driven by chain from the rear end of the crank-shaft.

A cross-shaft drives the dynamo and distributor, and as the former is mounted with its axis at right angles to the crank-shaft, the brush gear is particularly accessible.

Three S.U. carburetters are used, supplied by an electric pump from a 10-gallon rear tank. The battery and the tool box are carried under the bonnet, likewise a spare set of sparking plugs, and the good finish of engine and the polished wood tool box will appeal to those who take a pride in the less visible parts of the car.

A single-plate Borg and Beck clutch is used, with a dry thrust-washer and a special form of construction which makes adjustment unnecessary. The four speed gear-box is mounted on a bell-housing in unit with the engine. Four point suspension is used. The transmission is of normal type, with an open propellor shaft and spiral bevel final drive.

The chassis is a fine piece of work, with a central cross bracing. The front extremities are joined to the chassis at points level with the gear box while the rear limbs strengthen the frame where it carries the rear spring hangers. A further cruciform member under the petrol tank braces the rear portion of the chassis. The side members are upswept in front and pass under the axle at the rear. The springs and shock-absorbers are carried outside the chassis members, and the last named can readily be adjusted. The front shock-absorbers, are mounted transversely, and like those at the rear, are of the friction type.

Bendix duo-servo brakes are used and they operate in ribbed drums.

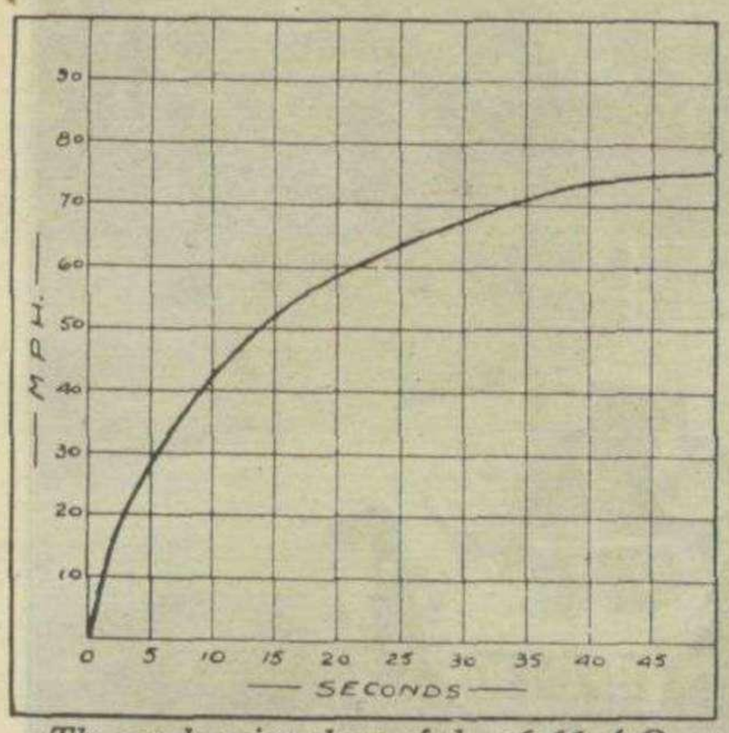
The lines of the four-seater body leave nothing to be desired and the car tested, which was finished in grey with blue lining on the edges of the bonnet louvres, attracted favourable attention everywhere. The underslung chassis permits a low body line which is not, however, carried to excess.

The front seats are upholstered with Dunlopillo, a cellular rubber composition, and covered with leather. This construction gives softness without swaying, while there is ample leg-room for a six-foot driver. The body has been arranged to give comfort for two without unnecessary width. The rear seats are comfortable too, but the position of the cross-bracing prevents wells being fitted for the full width of the floor. One full-sized passenger would have ample room, but two would be cramped on a long journey.

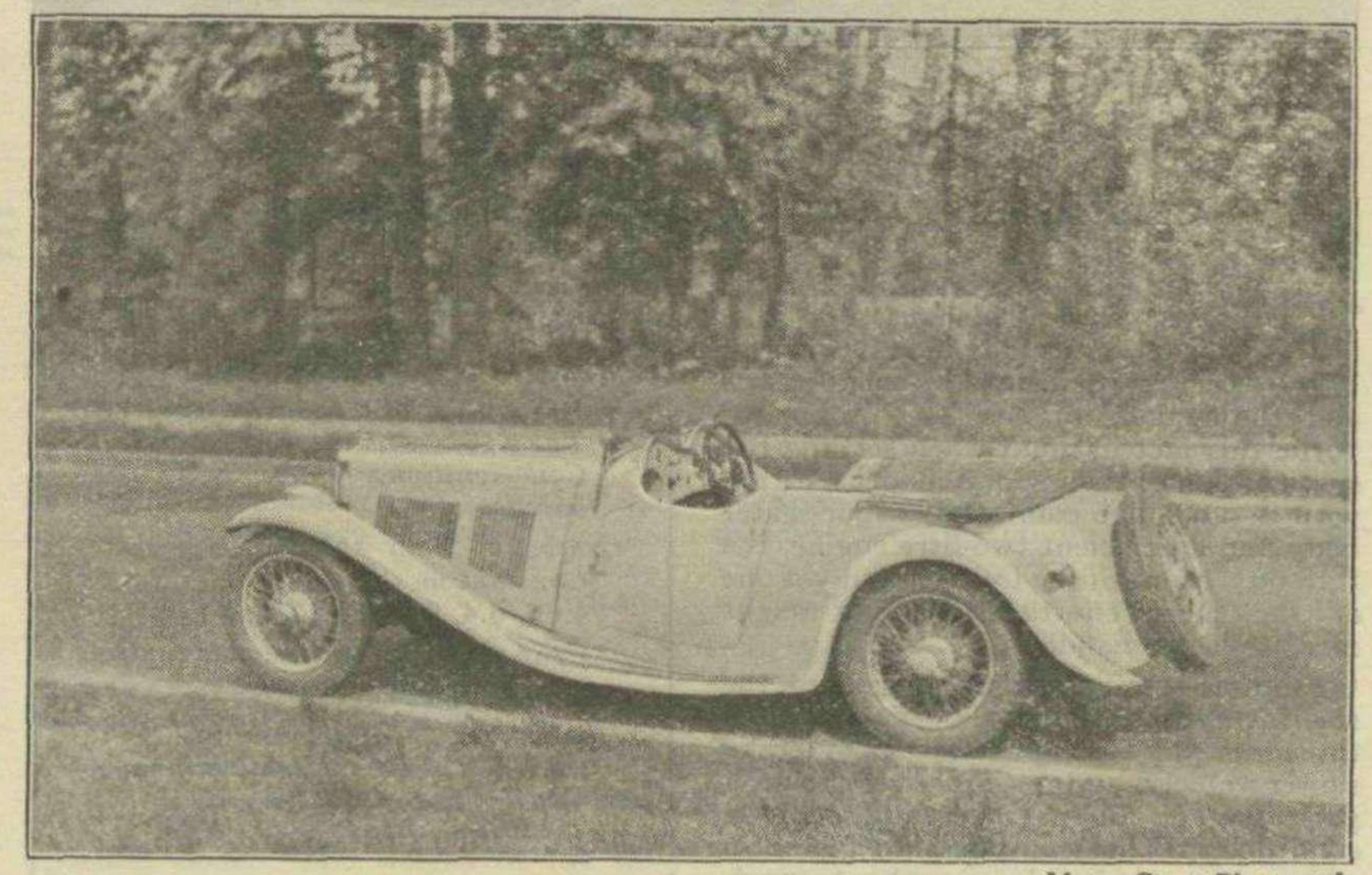
The all-weather equipment is good, the side-curtains being secured by hand-screws with tapered shoulders. When out of use the side-curtains are stored in the usual pocket behind the rear squab. A luggage locker large enough for two suit-cases is fitted in the rear of the body, and is reached by swinging back the hinged rear panel.

The price of the four-seater A.C. is £450, which seems very reasonable in view of the fact that it is hand-made throughout.

The address of the manufacturers is A.C. (Acedes) Cars, Ltd., Thames Ditton, Surrey.



The acceleration chart of the 16-66 A.C.



Motor Sport Photograph

An attractive four-seater body on the A.C. Ace. The treatment of the wings is particularly successful.

Subscriptions!

WHY NOT SEND YOUR FRIEND ABROAD A SUBSCRIPTION TO MOTOR SPORT FOR ONE YEAR ?

12 ISSUES - - **7s. 6d.**

POST FREE TO ANY PART OF THE WORLD

Publisher :

MOTOR SPORT (1929) LTD.

39 Victoria Street, London, S.W.1



the *Performance* tyre

DUNLOP RUBBER CO. LTD., FORT DUNLOP, BIRMINGHAM.
Branches throughout the World

C.F.H.

4H/138

Please mention MOTOR SPORT when corresponding with advertisers.

THE SINGER "ELEVEN"

A NEW LIGHT CAR OF ADVANCED DESIGN.

INDEPENDENT front-wheel springing has such manifold advantages, especially on cars of short wheelbase, that the system must be widely taken up sooner or later by English manufacturers. To the Singer Company belongs the credit of first bringing out a moderately priced chassis of this type, which is fitted with the novel Gordon-Marshall system of front-wheel suspension.

The steering pivots are carried by two parallel links, which swing in line with the chassis members. A bell-crank lever is attached to each of the links and a helical spring secured to one is compressed by a plunger passing through to the other. Each pair of links and its associated spring is damped by an Armstrong double-acting hydraulic shock absorber. Two substantial cross-tubes are mounted one above the other in the front of the chassis, and each swinging link has a shaft which is supported in two bearings in the tube. The tubes also act as oil reservoirs, and bearing wear should be negligible. Half-elliptic springs of normal design are used for the rear suspension.

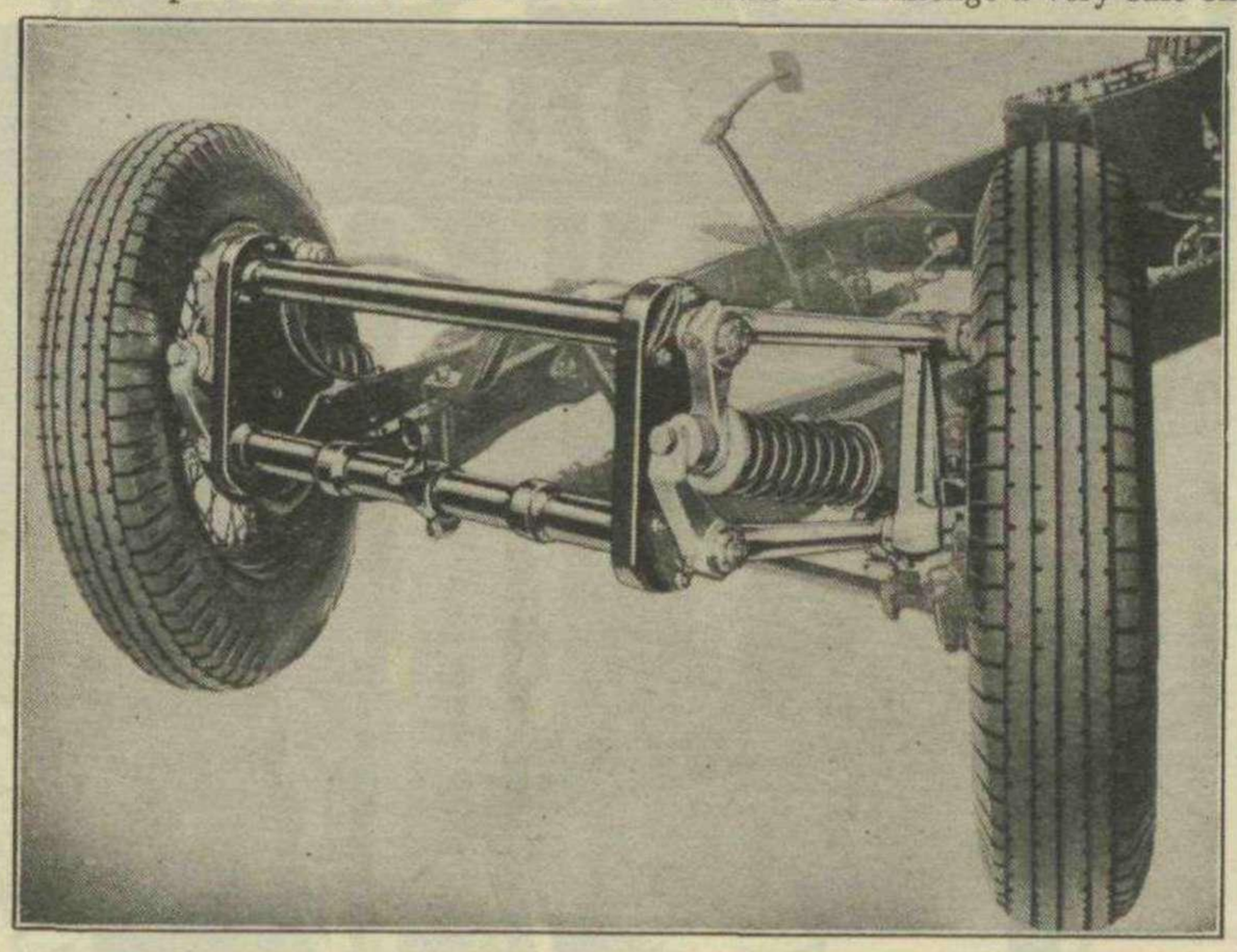
The power-unit is an overhead camshaft four-cylinder engine of 1384 c.c. capacity with a counter-balanced three-bearing crank-shaft. The Vulcan-Sinclair fluid coupling between engine and gearbox embodies several points not found on other fluid flywheels so far fitted to private cars. The driving and driven members have the usual vanes, which impart a spiral motion to the oil contained in the drive, but at low engine speeds the fluid drains off into a reservoir, so that there is a negligible amount of drag. As the engine is speeded up, centrifugal force drives the oil back through pipes into the vaned chambers and the familiar coupling effect is exerted.

The gearbox has constant-mesh second and third gears and a free-wheel, and with this in operation any gear can be selected by taking the foot off the accelerator and putting the gear-lever into the appropriate notch. Alternately the free-wheel can be locked and the car driven in the ordinary way, as the clutch pedal operates a two-plate clutch of normal design fitted between the fluid-drive and the gearbox.

All possible precautions have been taken to make the chassis rigid, a state of affairs particularly necessary with independent front-wheel springing. The side members sweep up in front to carry the two cross-tubes, and from the lower of these channel, section members run back to join the side members. The centre portion of the frame is braced by a cruciform member joined to the chassis through substantial flanges, and the rear part is swept over the back-axle. Lockheed hydraulic brakes are used and operated in ribbed drums of useful diameter.

The standard coachwork for the "Eleven" is a well-built four door saloon, and the complete car costs £240. Other closed bodies of modified aerodynamic design are being manufactured by Airstream Ltd. of London. With the standard body the car is capable of 65 m.p.h.

The cars were inaugurated at a special "Christening Party" at Birmingham last month and Mr. Bullock, the managing director of the Singer Company, invited his distributors, in a speech of characteristic vigour, to "take their new demonstration cars home and 'bust' them—if they could." The design and construction of the new "Eleven" appears to make his challenge a very safe one.



The independent front-wheel suspension on the Singer "Eleven."

LETTERS FROM READERS

The International Trophy.

SIR,—The Junior Car Club are to be congratulated on staging a fine race for the benefit of the public, but they cannot be congratulated on their handicapping. To put a 746 c.c. machine on the same mark as a 2,000 c.c. Continental racing car of the latest type, costing five times as much, does not appear to me quite right.

However, the one thing which is to be deplored is the fact that tens of thousands of people who watched this race, and who did not know very much about motor cars, went away with the impression that only the foreigner can build a fast car.

No English sportsman would want to see the smaller car—which is the only type of racing car this country produces—favoured at the expense of the larger Continental car, but it was obvious that the promoters of the race were determined that a foreign car should win. Considering that the donor of the principal prize was the one man in England who started the "Buy British and be proud of it," campaign, it would appear that the J.C.C. are a little lacking in tact to stage a race with the dice so heavily loaded from the very commencement against the British car.

I am, yours, etc.,
J. MALCOLM McINTYRE.
The Grove Cottage,
Radlett, Herts.

Road Accidents

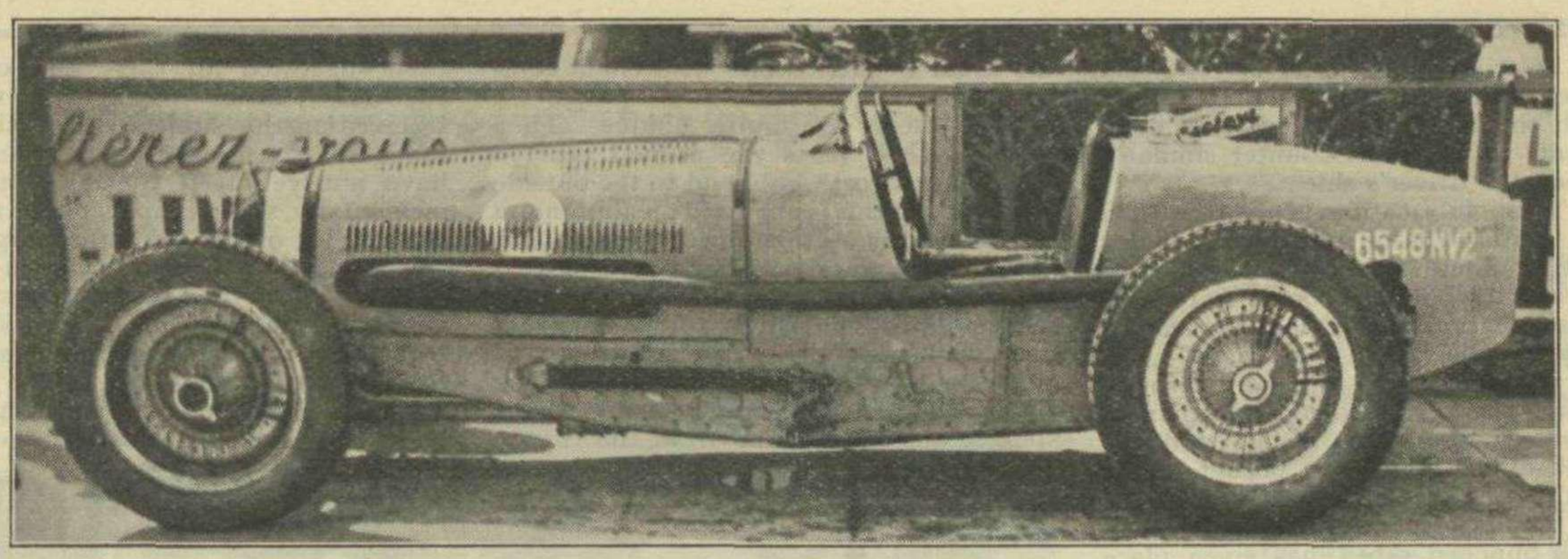
SIR,—In his attempt to reduce accidents in built-up areas by imposing a 30 m.p.h. speed limit, can the Minister of Transport have considered this question: Which is responsible for more accidents, a fast car or a slow-moving vehicle, such as a tram?

There seems to be no doubt whatever that trams (which operate almost entirely in built-up areas) are the indirect cause of many accidents in which they themselves are not directly involved. The main reason for this is that they are unable to draw in to the side of the road to set down or pick up passengers.

Quite apart from this aspect, many accidents occur when a motorist is passing a tram on the inside—as is required in most towns. A pedestrian thoughtlessly steps off the pavement and the motorist is unable to swerve because he is squeezed in by the tram . . .

So far as built-up areas are concerned, the toll of the road will never be materially reduced while the menace of the trams exists. If these effete vehicles were replaced by up-to-date transport throughout the country, the number of alleged motoring accidents would be reduced enormously.

I am, yours, etc.,
G. G. HAYDEN,
Sales Manager.
Triumph Company, Limited,
Coventry.



1934 RACING CARS

No. 7.—THE 2·8 LITRE BUGATTI

IN 1932 the 2.3 double camshaft Bugatti and the 2.3 litre Alfa-Romeo enjoyed the distinction of being the two supreme European racing cars, and there was virtually nothing to choose between them. Suddenly the situation changed, for the new single-seater Alfa which made its debut at the French Grand Prix that year completely outpaced its rival.

The reputation of the Bugatti had been built up on racing successes, and Monsieur Ettore had no intention of falling behind in the struggle for supremacy. A new and specialised vehicle like a racing car cannot be evolved in a day, but already by October, 1932, there were rumours of a successor to the " 2.3." The decision of the Alfa-Romeo factory not to race the Monopostos in the 1933 season gave the French factory a further breathing space, which was particularly welcome in view of the 750 Kg. weight restriction to be enforced during 1934.

Three of the new cars were entered in the Spanish Grand Prix in September, 1933, as a preliminary test, to be driven by Varzi, Dreyfus, and Wimille, but the latter crashed in practice. The two cars which ran did not seem to be conspicuously successful, finishing only fourth and sixth, while Lehoux on a " 2.3 " came in third, over a minute ahead of Varzi.

Development continued during the winter, the principal exterior alteration being the liberal drilling of the side members. The first appearance of the cars in their ultimate racing trim was arranged for the Monaco Grand Prix. The official racing team consisted of Dreyfus, Wimille and Benoist, Nuvolari was also driving a " 2.8," but as an independent entry.

Benoist crashed in practise, damaging a back axle, which could not be replaced in time. Wimille was eliminated at an early stage through the shearing of the rivets in one of the back brake-linings, leaving Dreyfus to carry on alone. His car cornered well and was noticeably steady when braking. Its maximum speed seemed less than that of the Alfa Romeos, but this may have been due to team orders. The tactics seemed justified, as Dreyfus finished a comfortable third.

Nuvolari expressed himself well satisfied with the car in practise, and hoped to be able to lap at 1 min. 58 secs. during the race. On the day however, he found that he was unable to hold the car on corners at the same speed as during the practises.

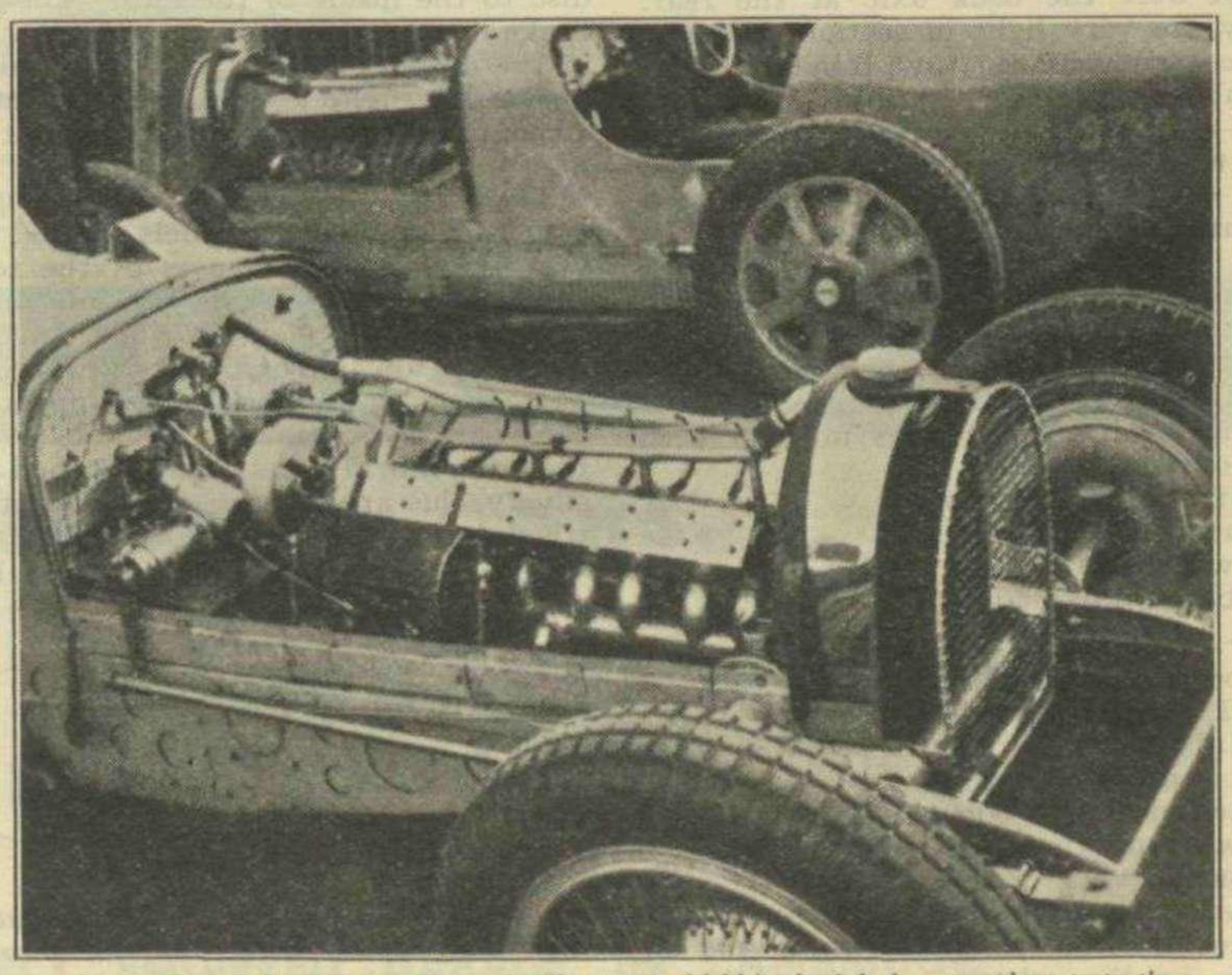
With a full petrol tank the tail swung round, and the hydraulic shock-absorbers were not readily adjustable. He therefore carried on as best he could until the tank was half empty, when he regained his speed. His braking trouble was due to extra-hard use in trying to regain the time he had lost. He finished fifth.

The " 2.8 " Bugatti differs from all the other Grand Prix cars so far described in being nominally a two-seater. Actually of course, the oil-tank occupies what would normally be the mechanic's seat, but by seating the driver alongside the transmission instead of on top of it, Monsieur Bugatti has achieved a low seating position without any complications.

The engine specification differs radically from that of any previous model. In the first place, the crank-shaft is carried in nine plain bearings, and white-meta bearings are also used for the big-ends The cylinder head and block are both made of steel, in one unit, with two overhead valves per cylinder set at 90 degrees to one another and operated by overhead camshafts. The sparking plugs are mounted in the centre of the heads.

The camshafts are driven by trains of gears from the rear end of the crankshaft and the supercharger, which is tucked away on the off-side of the engine is also driven in this manner. Two down-draft Zenith carburetters are bolted to the top of the casing and are protected by a gauze screen. The two throttles open in opposite directions, and are therefore linked together by a pair of toothed quadrants. The fuel is fed by pressure from the rear tank, which holds about 30 gallons.

The water pump, with the characteristic Bugatti greaser, is carried on the left side of the engine in a position corresponding to that of the supercharger.



The engine of the 2·8 litre Bugatti. The gauze shield in the left foreground protects the carburetters. In the background is one of last year's 2·3 litre cars.

THE 2.8 LITRE BUGATTI—continued.

The Scintilla magneto is driven from the near-side camshaft and projects through the dash into the driving compartment, with the rev-counter similarly driven on the driver's side.

Dry sump lubrication is used, with a finned sump. The oil tank, which holds about 2½ gallons, is carried alongside the driver, and the hot oil is cooled by passing it through a multi-pipe cooler which is mounted on the side of the chassis. The engine is started from the side, through the timing gears. The hole for the handle will be seen above the cooler, and the actual handle is kept in a pocket in the cockpit.

The familiar Bugatti exhaust system, with its bunched pipes, has given place to a close-up manifold and a large tail-pipe. This is probably the reason why the familiar crackle has given place to a typical Grand Prix roar.

The engine seems much longer than that of the " 2.3," partly owing to the use of plain bearings, and is carried very low in the chassis. In outward appearance it is almost identical with that of the sports " 3.3 " described in last month's issue of MOTOR SPORT.

A multi-disc clutch is used, and the gear-box is mounted independent of the engine with a right hand gear-change. The brake-lever is, however, on the driver's left.

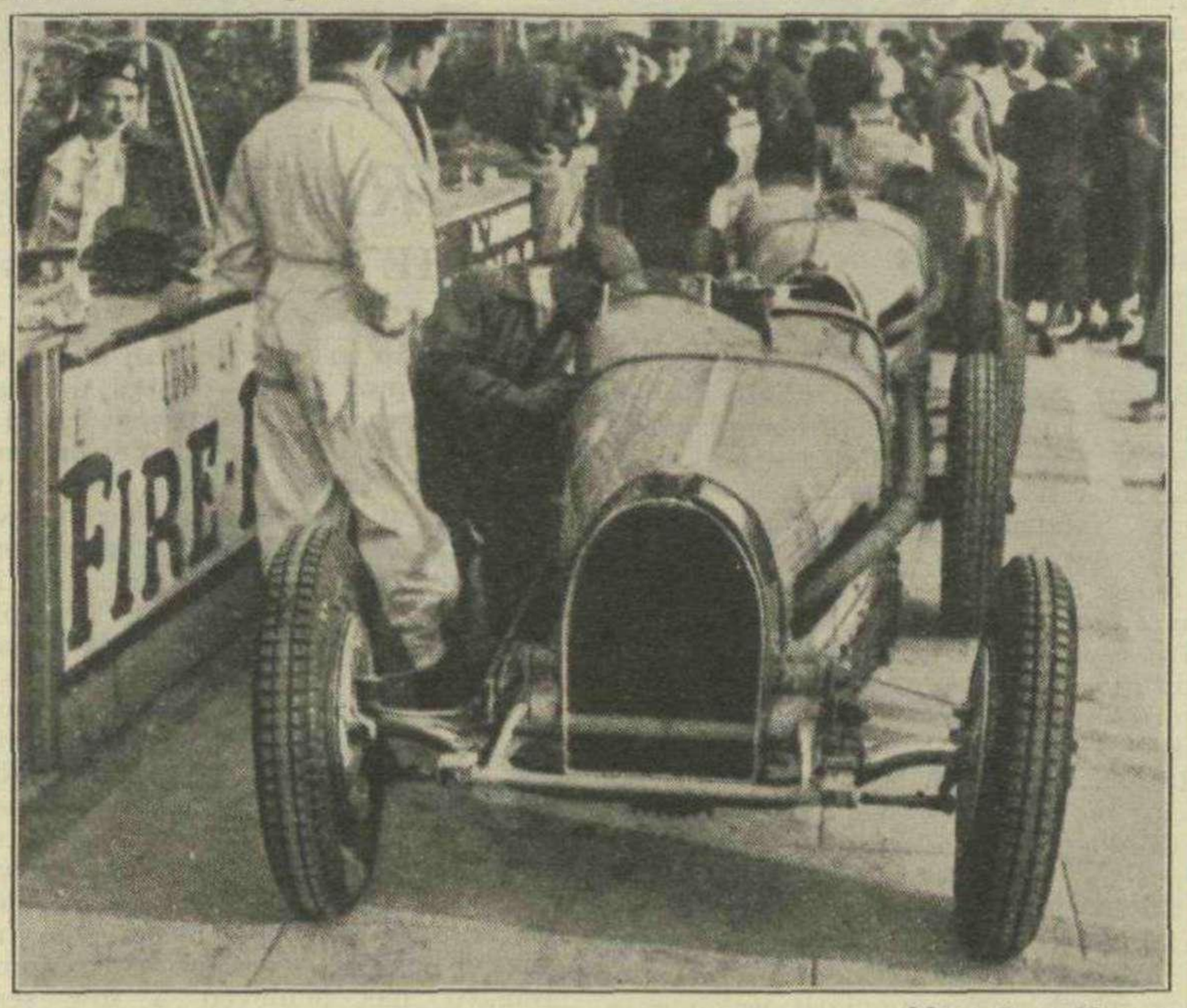
The open propeller shaft has a long torque member running alongside it from the back-axle to a universal joint on the gear-box. At first sight the final drive appears to embody worm gears, for the driving-shaft comes in beneath the axle centres, but actually there is a double reduction. The " prop-shaft " drives a pair of bevels, and a further reduction is effected through a pair of straight pinions. This gives a compact casing and a low propellor shaft line.

The flanges of the side-members are immensely deep, some 9 inches in depth in the centre of the car, tapering off in front to form the front dumb-irons, and swept over the back axle at the rear. They are very light in section, liberally drilled and braced by tubular cross-members. The front springs—which are semi-elliptics—are pivotted at the rear and work in slides in the front end, while stiff wide reversed quarter-elliptics with a number of clips are employed at the rear. The front axle is in two pieces, with a central shouldered shaft against which the two halves butt. The outer sections are drawn together by a central nut with right and left hand threads, and the springs pass through lugs integral with the outer sections.

The track of the car is about 4 ft. 4 ins., and the wheelbase appears to be approximately 8 ft. 10 ins.

Special hydraulic shock absorbers are used back and front, the front ones being housed inside the bonnet with only the arms, as usual very much drilled, projecting. The brakes are almost as large as the wheels, and are operated by the usual Bugatti cables with chain compensators.

The wheels are quite unique. They have as their basis the normal tapered Rudge Whitworth hub, and to the outside extremity of this is attached an aluminium disc conical in section and furnished with serrations at the rim. The tyre is carried on a flat-base rim, with a split outer flange which allows the cover to be changed, and made with internal serrations to engage with those on the wheel disc. The rim is held in position by two sets of spokes, one set running from the rim to the outer extremity of the hub, while the other set pass through holes in the disc to the inside of the hub. The steel brake-drums are attached to the rear side of the disc. The new wheels are said to be 10 lbs. lighter than the aluminium-spoke pattern formerly used, without any loss of rigidity.



Motor Sport Photographs

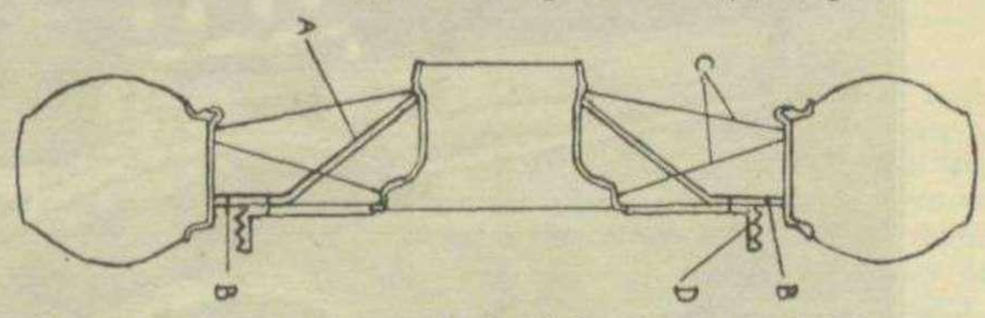
Typically Bugatti, but reduced in overall height. Dreyfus' "2.8" at Monaco

The bodywork is the usual Bugatti type, with aluminium panels secured with wire lacing. The bonnets of the team-cars were all in one piece, made out of two sheets of metal welded together along the top line of the body where the hinge would normally be. In appearance the " 2.8 's " are lower and more slender than the 2.3 litre cars, and finished in a silvery blue are as attractive as anything which has ever left the Molsheim factory.

Maximum speeds of 175 m.p.h. have been suggested for these new cars, but the only official information we have received on this subject is that they have exceeded 165 m.p.h. by rev-counter, but have not yet been timed. This speed, incidentally, was put up on public roads, on the fast leg of the old Strasbourg circuit.

The official team, as chosen at the beginning of the season, consisted of Dreyfus, Wimille and Benoist, with Nuvolari driving as a semi-independant in the International Grands Prix. Dreyfus has been with Bugatti for the past two years and backed up Varzi in several of his successes, such as the Monaco G.P. in 1933, in which he was third. Wimille as the " independant " driver of a 2.3 Alfa-Romeo was second in the Marne and Comminges Grand Prix last year, and will be a very useful member of the team. Benoist, who in 1926-7-8 was uncrowned champion of Europe, driving Delages, and who occupied as prominent a position as Nuvolari did last year, gave up racing at the close of 1928, but after a month of practice on Montlhéry and elsewhere seemed to have recovered all his former skill. A damaged back-axle in the Monaco G.P. prevented him from driving there. A last-minute addition to the team is that of Brivio, who won last year's Targa Florio on an Alfa, and also did well in the Bordino and Ciano races.

It seems rather paradoxical that a firm established in what was Germany from 1903 until 1919 should be the sole representative of France in the international races of the present day. Without government support Bugatti cars have until the arrival of the Monoposto Alfas held their own with credit, and the many Bugatti enthusiasts in England will join in hoping that the latest creations of Monsieur le Patron will once more compete on even terms with the Italian cars.



A cross section of the road wheel fitted to the 2.8 Bugattis. (A) *is the aluminium disc, which drives the rim through serrations at* (B) *; wire spokes* (C) *support the rim at its outer edges ;* (D) *is the brake drum.*

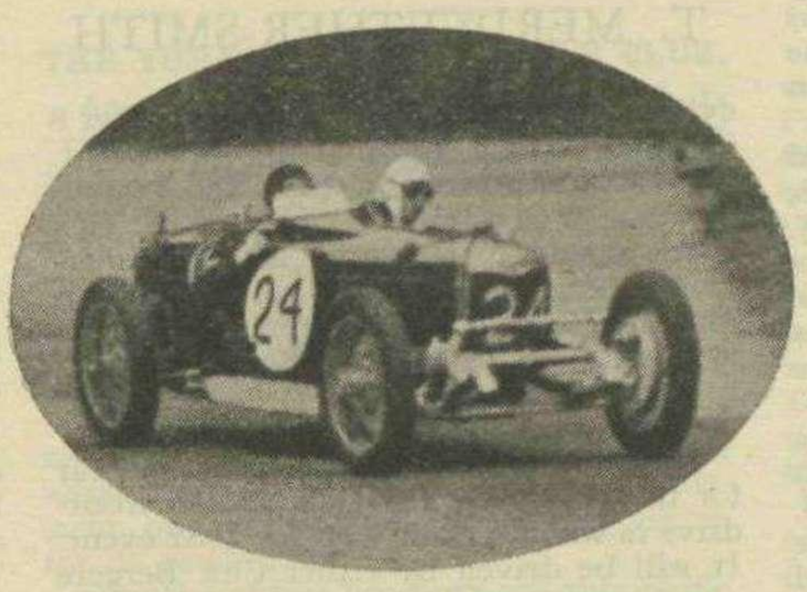
BEECHOLME MOTOR COMPANY

(J. EASON GIBSON.

OUR ADVICE IS FREE !

RILEY

THE CAR TUNED AND RACED BY Mr. J. EASON GIBSON DURING THE SEASON OF 1933



SPECIALISTS IN THE PREPARATION OF CARS FOR RELIABILITY, AND ROAD OR TRACK RACING EVENTS

FRAZER NASH

Every member of our staff is a specialist and all work carried out under the personal direction of the Proprietor.

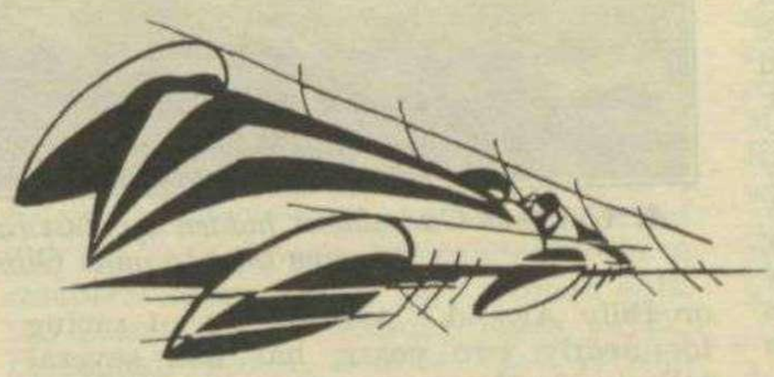
Write, Call or 'Phone

39, NIGHTINGALE LANE, BALHAM, S.W.12

BATTERSEA 1392

TELEPHONE : 3091.
GRAMS : "CAMHEAD," CAMBRIDGE.

GLOUCESTER STREET, CAMBRIDGE.



JOHN HOULDSWORTH LTD.

FOR SPORTS CARS.

SPECIALIZING IN BUGATTI REPAIRS AND SPARE PARTS.

THE MOST COMPLETELY EQUIPPED GARAGE IN CAMBRIDGE.

NEWS FROM THE U.S.A.

LOUIE MEYER WINS ASCOT ROAD RACE AND OAKLAND 250-MILES CLASSIC WITHIN A WEEK— INDIANAPOLIS HUMS WITH PRE-RACE ACTIVITY.

BY

Our American Correspondent

T. MERIWETHER-SMITH

THE 1928-29-33 National Racing Champion, Louie Meyer, has inaugurated his 1934 season with two brilliant victories in long, gruelling stock car races in California. Meyer was fourth in his first start of the year, the Mines Field Gilmore Cup road race in February.

Ascot Speedway, Los Angeles, staged a 151-mile road race on a hilly, dirt course, on April 22nd. The course, about 1½, miles in length, ran about three-quarters of the Ascot track, then cut out over the hills behind the track, winding up a 25 per cent. grade, and back on to the speedway.

Louie Meyer won this race, exhibiting a brand of skilful, cunning driving that proved unbeatable. Driving a Ford V-8, Meyer averaged 51.33 miles per hour for the winding, rough course, beating Ted Horn to the finishing wire by seven seconds. In spite of the tricky course, there were no accidents other than many hectic skids, and a few sorties into the hay barriers on the curves.

Al Gordon finished third; Cliff Bergere, fourth; Danny DePaolo, fifth; Rex Mays, sixth; Stubby Stubblefield, seventh; Woody Woodford, eighth; Chet Gardner, nine; Eddie Meyer, tenth. They were all driving Ford V-8 roadsters. A Plymouth and a Willys finished the race, but out of the money. Frame, Indianapolis and Elgin winner, was forced out with a broken spindle. The lone Terraplane entry was also forced out of the grind.

Oakland Speedway, a fast mile dirt course, was the scene of a 250-mile road race late in April. Louie Meyer again demonstrated his superior skill in these long distance affairs, coming from behind to win the event in the closing laps. There were no accidents of a serious nature. Meyer defeated Ted Horn and Danny DePaolo in a stirring closing drive. Danny —brother of Peter DePaolo—is rapidly developing as a speedway driver, and may yet rival the great record set up by his more noted brother. Meyer did the 250-miles at over 70 miles per hour.

* * *

Ira Hall began his 1934 season with a triumph in the 15-mile feature race on the dirt track at Rockville, Indiana. He was driving a Vance Special, and beat Kelly Petillo and Harry McQuinn to the finish. Five mile sprints were won by Al Miller, Ira Hall, and Emil Andres. Mauri Rose was unplaced at these races.

* * *

Langhorne Speedway, Pennsylvania, opened the Eastern season, and Johnny Hannon provided the fireworks, winning the 100-mile feature race in easy style. He led throughout in his Miller Special. Lloyd Vieux was second, Maynard Clark third, and Billy Winn fourth. The next day, April 29th, Hannon captured the feature race at Pottsville, Pennsylvania.

* * *

Fred Frame has entered three machines in the Indianapolis race, two Miller 4-cylinder jobs, and the front-drive Miller 8 in which Arnold captured the 1930 event. Frame is expected to drive the famous "catfish" streamlined job, while Rex Mays is said to be slated for the Miller-Duesenberg 4. No driver has been picked for the eight-cylinder front-drive, but it may be handled by Paul Bost, according to experts.

* * *

Harry Hartz has entered only one car for the 1934 race, the Hartz-Miller front-drive in which Frame won the 1932 event. It will be driven by either Cliff Bergere or Billy Arnold. Arnold, out of racing for nearly two years, has had several talks with Hartz regarding the car, and may be seen at the wheel on May 30th. He is recognized as the most spectacular driver of the present day school.



Al Gordon's Car almost hidden by dust raised by a skid around a hair-pin bend when winning the 250 miles Gilmore Gold Cup Road Race.

Bill Cummings, favourite with the race fans everywhere, will drive Mique Boyle's 4-cylinder Miller front-drive in the race, while the team's fast 8-cylinder job will be handled by George Barringer.

Chet Gardner is to drive the 16-cylinder Sampson entry, again boasting a radio broadcasting and receiving hook-up with the pits.

Jack Petticord, veteran dirt track campaigner, who has not competed at Indianapolis since 1927, has entered a streamlined, ultra-hotted-up Ford V-8 machine, which has produced several fast laps in practice sessions at the speedway. Petticord enjoyed a successful season last year.

Chet Miller is scheduled to drive the front-drive Studebaker job in which Dave Evans secured sixth position last year. Chet and Al Miller drove the Hudson entries last year, but they are not listed this season.

Paul Butler has entered a special machine, said to be powered with a Lincoln motor.

Leon Duray is expected to drive a 16-cylinder 2-cycle car in the race, with Mauri Rose handling his 4-cylinder Mallory machine.

Frank Brisko has re-designed his Miller 4-wheel-drive, streamlined it more effectively, and installed a 4-cylinder motor.

Wilbur Shaw and Kelly Petillo are driving the 4 and 8-cylinder Gilmore entries.

Dave Evans and Stubby Stubblefield are listed to pilot the two Cummins Diesel entries, a pair of entries that are attracting the eyes of the motor world. These cars, one a 2-cycle, are much shorter and lighter than Cummins' entry in the 1931 race, which ran the 500-miles without a stop to finish in 14th place. They are both equipped with Rootes blowers.

Peter DePaolo and Lou Moore are expected back from Tripoli in time to qualify for the big race.

Among the entries for the race are found every type of motor now racing in the States: 4, 6, 8 and 16-cylinder jobs; a rotary valve engine; a pair of 2-cycle cars; oil burners; and radically streamlined converted stock jobs. A front-drive 6-cylinder machine has been entered by the veteran mechanic, Roscoe Dunning. There are 53 entries in the classic.

The limit of 45 gallons of petrol is expected to keep the record of 104 miles per hour, made by Meyer last year, safe for at least another 12 months. However, reports from the speedway, hinting of new discoveries in very heavy petrol, producing several more miles per gallon, give the drivers a slight hope of shattering the mark.

Club News

MID-SURREY A.C.

The Grand Cup Trial, held on Saturday May 5th, attracted an entry of 27 cars, of whom 23 were starters. The start took place at Ripley and the first observed hill to be encountered was Blind Lane, near Thursley. Most people got up quite easily, but W. Drake (Riley) and P. B. Henderson (A.C.) both lost marks.

Through Hazlemere and Liphook the competitors next came to the Special Test on Scotland Hill. Drake was again penalised here, as were L. Audigier (Riley) and R. F. Fraser (Triumph). Audigier then proceeded to lose his way with the result that he lost another 14 marks before reaching the finish. Fastest time of all in the Special Test was made by A. C. B. Bennett (Vauxhall) in 22 seconds, with J. A. Robinson (Lancia) second in 26 seconds. Other who got below 30 seconds were E. F. M. Ryde (Wolseley), A. Powys-Lybbe (Alvis), T. H. Winterborn (Alvis), G. May (Alvis), F. R. Samuel (Lancia), P. B. Henderson (A.C.), A. D. Taylor (Riley), A. P. Squire (M.G.) and W. R. Falconer (M.G.). Oakshott Hill was not too easy, and the luckless Drake was again among the failures; the others were A. Powys-Lybbe (Alvis), T. H. Winterborn (Alvis), G. May (Alvis) and R. F. Fraser (Triumph).

A Restart Test was held on Old Stonor, and all competitors got through within the specified time with the exception of G. May (Alvis), T. H. Winterborn (Alvis), E. F. Jones (M.G.) and R. F. Fraser (Triumph). Fastest time was made by A. P. Squire (M.G. Midget) in 1.6 seconds. A. C. Fairtlough (A.C.) and W. R. Falconer (M.G. Midget) shared second place in 2 seconds dead.

Steep Hill was divided into two sections. Both were difficult, and proved too much for F. A. Thatcher (Singer), W. Drake (Riley), P. B. Henderson (A.C.), A. P. Squire (M.G.), R. F. Fraser (Triumph) and E. E. Jones (M.G.). Other stoppages on the first section were C. G. Fitt (M.G.), and W. R. Falconer (M.G.), while Part Two also accounted for G. May (Alvis).

Back through Petersfield and Liphook came the cars to Whitmore Valley Hill, where J. Stewart (Lancia) lost his first marks and R. F. Fraser (Triumph) and E. E. Jones (M.G.) added to their considerable scores. And so to the Huts Hotel, Hindhead, and the end of an enjoyable, well-organised trial.

RESULTS.

Sopwith Cup.—A. C. B. Bennett (Vauxhall).
Runner-Up.—J. A. Robinson (Lancia).
Tankards (100 marks).—E. F. M. Ryde (Wolseley), A. C. Fairtlough (A.C.), R. C. Porter (Riley), A. R. Samuel (Lancia), R. H. Massey (A.A. Special), A. D. Taylor (Riley), T. A. Law (Riley), M. Pinker (Singer).
Other Finishers.—C. G. Fitt (M.G.), F. A. Thatcher (Singer), W. Drake (Riley), A. Powys-Lybbe (Alvis), T. H. Winterborn (Alvis), G. May (Alvis), J. Stewart (Lancia), P. B. Henderson (A.C.), L. Audigier (Riley), A. P. Squire (M.G.), W. R. Falconer (M.G.), R. F. Fraser (Triumph), E. E. Jones (M.G.).

THE YORKSHIRE SPORTS CAR CLUB.

As a souvenir of the first year of its existence, the Club has produced a most attractive booklet dealing fully with all the events that have taken place during that time. In addition there are pages written by the President, Mr. J. Kingston Whittaker; the Secretary, Mr. W. Harral Hudson, and another page by the same gentleman in his capacity of Treasurer. A page of photographs has been cleverly inserted in the centre of the booklet, and altogether it is a fine example of enthusiasm on the part of those responsible for its production.

Supplies of this brochure are obtainable by non-members who comply with the following conditions: (1) they must be resident in Yorkshire; (2) they must state the make and model of the car they run, and (3) they must enclose 3d. in stamps to cover distribution costs.

The Secretary of the Club is Mr. W. Harral Hudson, Avenue House, Woodhouse Lane, Leeds.

THE LIGHT CAR CLUB.

Supplementary Regulations for the Fourth British Relay Race are now to hand. The event will take place at Brooklands on July 21st, and is only open to cars of under 1,500 c.c. capacity. The teams of three cars have to run 90 laps in all, each car covering 30. If, however, mechanical trouble should be encountered the driver can "hand over" to the next man who has to cover the remaining laps in addition to his own 30.

It is worth noting that the entry fees are extremely reasonable, being £2 2s. per car (provided that the entrant is a Club member). Single drivers who would like to enter, but who cannot form a complete team, should get in touch with the Secretary, Mr Harold Jones, of 22, Basinghall Street, London, E.C. 7, who will probably be able to fix them into a team.

THE LAGONDA CAR CLUB.

Lagonda owners are renowned for their enthusiasm, as those who used to attend the Rallies at Brooklands will well remember. Nowadays the Weybridge track is not available for affairs of this description, and so aerodromes are in favour among organisers.

The second Lagonda Rally this year was held at Hanworth Aerodrome on Saturday, May 12th, and proved well up to standard. After the usual competition for the car travelling the longest distance to the Rally (won by T. Coley on a 16/80 h.p. saloon), gymkhana events were held for the rest of the afternoon, starting with the time-honoured potato race, which calls for such close co-operation between driver and passenger. This was won by P. J. Field Richards (3 litre Lagonda).

The next event caused much amusement—and in some cases consternation. Passengers (female, by order throughout the programme), had to sprint to a row of glasses of lemonade; consume same through a straw as expeditiously as possible; run back to their cars; be driven 50 yards to a balloon which had to be burst by mouth-blowing; and then be driven 70 yards to the finishing line. This complicated series of evolutions was won by P. F. Pritchard, driving a blown 2-litre Lagonda.

"Musical chairs" concluded the programme, and after much rushing about from bucket to bucket the winner was found to be F. J. Stephenson, assisted by his passenger and a very beautiful "four-and-a-half."

"Your Secretary Mr. Vokes," and Major W. H. Oates are to be congratulated on organising a most enjoyable afternoon's sport.

THE W.A.S.A.

North Wales was the locality chosen for the Women's Trial held on Saturday, May 12th. There were 25 starters, divided into eight teams, and the start took place at the Hand Hotel, Llangollen, amid beautiful weather.

After a quiet detour of 13 miles, the first hill was encountered, Allt-y-Bady, which proved to be in rough condition, owing to the recent activities of Army tractors. Only three cars failed to ascend unaided, while the rest made good climbs. A brake-test near Maentwrog resulted in fastest time being made by Mrs. K. Petre, driving R. J. W. Appleton's Riley. Miss Doreen Evans (M.G. Midget) was 2/5ths second slower, while Miss Astbury (Singer) and Miss Blathwayt (M.G. Midget) tied for third place in 8 4/5 seconds.

Lunch at David's Hotel, Harlech, was a prelude to the real business of the day, the difficult ascent of Urry's Pet. The gradient is really fierce, and a stream running down past the corner does not help matters. Good driving was displayed by the majority of competitors, among them being Miss Daniell (Wolseley Hornet), who was the first to come up, Mrs. Petre (Riley), Miss Milne (Singer) and Mrs. Stanton (Riley). Miss Bean got stuck good and firm on the rocks and her Singer had to be lifted by no fewer than 13 men before it could be moved.

Miss Richardson (Singer) made fastest time in the restart test on Roman Steps, covering 20 yards in 7 seconds. The remaining hills, Pandy Hill near Dolgelly, and Cader Idris, were not troublesome. As usual, Mrs. Goold's organisation was perfect.

RESULTS.

Countess Howe Team Trophy.—Mrs. Vaughan (Standard), Miss Daniell (Wolseley Hornet), Miss Bean (Singer).
First-Class Awards.—Miss Daniell (Hornet), Miss Wild (Ford), Miss Blathwayt (M.G.), Miss Champney,

CLUB NEWS—Continued.

Miss Hobbs, Mrs. McKenzie, Mrs. Legsley (Rileys), Miss Astbury, Miss Richardson (Singers), Miss Marshall (G.N.).

SUTTON COLDFIELD AND N. BIRMINGHAM A.C.

Last year the Inter-Club Team Trial was somewhat disappointing, the entry being confined to a handful of teams. This year, however, no fewer than 23 entries of three cars each were received, and the stage was set for a trial which would finally decide the 'best' club.

The Buxton district was the scene of the event, and soon after leaving the town the first test was held at Burbage Edge, near the famous "Cat and Fiddle." A most original series of evolutions had to be carried out over an artificial S-bend up a gradient of 1 in 15. The three cars of each team were lined up, and on the word "Go!" the first man had to accelerate as fast as possible through the bend, reverse round a pylon and dash back, handing over a bâton to the next man, who proceeded to do the same thing.

As it happened, the standard of driving was distinctly poor, with the result that times were bad in most cases. Fastest of all was the Singer M.C. "A" team, consisting of 1½ litre Le Mans models driven by J. D. Barnes, J. R. H. Baker and A. H. Langley. Their time was 2 min. 10.6 secs. Next came the Singer C.C. "A" team with a time of 2 min. 11.2 secs. There were two "Nines" and a "1½ litre," handled by J. A. M. Patrick, F. R. G. Spikins, and C. B. Goodman.

Blackermill is a curious hill. Sometimes it is so easy that no one stops at all; at other times, as for instance on May 5th, when it rained during the morning, car after car comes miserably to a standstill. With Blackermill in such a state one would have thought that Litton Slack would have been almost insurmountable. In actual fact, however, quite a lot of people climbed the latter who had failed on Blackermill.

The organisers were bent on making the trial as difficult as possible, and a restart test on Putwell Hill scored a record by failing every competitor save A. E. Hann (M.G. Midget), of the West Hants L.C.C. Finally Cow Low, that winding grass track which can be impossible when wet, was included in the programme, but caused less difficulty than was expected.

The Palace Hotel saw much talk that night about adventures and triumphs of the trial, and the results were eagerly awaited. Then it was announced that the M.G. Car Club "A" team were the winners, having lost only 7 marks. The runners-up were the West Hants L.C.C. "A" team, with the Brighton and Hove M.C. "A" team third.

Here are the full details:—

The "Autocar" Trophy.—M.G. Car Club "A." 7 marks, lost.—J. M. Tomlin (M.G. 847 c.c.), 5 marks; J. A. Bastock (M.G. 847 c.c.), 1 mark; R. A. Macdermid (M.G. 847 c.c.), 1 mark.

Runners-Up.—West Hants L.C.C. "A," 13 marks lost.—E. H. Banfield (M.G. 1,250 c.c.), 11 marks; A. L. Hann (M.G. 847 c.c.), 0 marks; J. L. Tully (M.G. 1,250 c.c.), 2 marks.

Third Team.—Brighton and Hove M.G. "A," 17 marks.—W. E. Chandler (Morris 847 c.c.), 3 marks; M. H. Lawson (Singer 972 c.c.), 11 marks; R. J. W. Appleton (Singer 972 c.c.), 3 marks.

KENT AND SUSSEX L.C.C.

There is an attraction about the Lewes Speed Trials which has not a little to do with the easy-going atmosphere which characterises these events. There is plenty of room for the spectators, they can see all that is going on, and cars accelerate up the half-mile course without any tiresome delays.

A splendid entry of over 100 had been received for the opening meeting on May 12th, and a large crowd collected to enjoy a good afternoon's sport on the Race Hill. The sun shone with midsummer strength, and the meeting, as a whole, was a huge success.

A S. Whiddington (Alvis Firefly) was the first man to speed up the road, his time being 37 seconds dead. Fastest time in this class, for unlimited touring cars, was made by M. A. Benachi (Bugatti 3.3. saloon) in 31.4 secs., beating an 8 litre Bentley, a 4½ Invicta and a Speed 20 Alvis.

Then followed a special class for M.G.s of all descriptions, the winner being E. H. Gehlcken on a Montlhéry Midget with a time of 31.4 secs. The "Hornet Class" went to F. S. Hutchens in 32.2 secs., N. E. Bracey coming second in 34.4 secs. Gelchken met his match in the super sports 1,100 c.c. class, being third to F. R. G. Spikins (Singer) and J. A. Driskell (B.N.C.). Spikins drove extraordinarily well, and his time of 30 seconds dead was one of the "high-spots" of the day.

The class for Standard Sports Cars up to 1,500 c.c. provided some interesting comparisons, and the winner was S. E. Cummings with his Frazer Nash, time 28.4 secs. The "Chain Gang" had it all their own way, H. D. Inderwick being second and H. P. Dawborn third. Cummings repeated his success in the Super Sports Division.

They came the most popular class (so far as number of entries is concerned) of the meeting, for unlimited super sports cars. There were Bugattis of all sorts, Bentleys, Vauxhall 30/98's, Alfa-Romeos, "Mercs," and others, so that the job of picking the winner would be a difficult one indeed. One after another driver's came to the line, flogged their cars up through the gears and roared over the finishing line. Fastest of all was F. Lycett with his 8 litre Bentley, which covered the course in 25.2 secs. Second was Urlwin Smith (4½ litre Invicta), and another 8 litre Bentley in the hands of L. Sandford came third.

Of the Racing Classes, G. E. W. Oliver won the 1,100 c.c. class in a Morgan, his time of 27.6 secs. being extremely good. But no real speed had as yet been seen, and it was left to the record-holder, R. G. J. Nash, to bring those spectators who were basking in the sun and taking a mild interest in the proceedings, to a pitch of excited enthusiasm. "The Spook" was in fair form, when it could be induced to start, and Nash's first run was done in 22.4 secs. Second in the class was F. R. G. Spikins, who made an astonishing performance with his unblown Le Mans Singer in 28.4 secs.

The 2,000 c.c. class provided the first public appearance of the new Bolster Special "16." J. V. Bolster was the only starter, and his time of 23.2 secs. earned for him the second fastest time of the day. His progress was lurid in the extreme, and for sheer thrills was the event of the day. The new "Mary" has two motor-cycle engines, both driven on one wheel (!)

Dick Nash carried off the Unlimited Class in 24.2 secs. from Sandford's Bentley, and the Handicap Class went to Alan Bainton's 2.3 litre Bugatti.

From the competitors' point of view the awards were splendid, being actually more numerous and better than those advertised in the programme, silver cups, silver medals and bronze medals being available in profusion. Mr. H. V. Warren is to be congratulated on organising Speed Trials which are models of their kind:—

RESULTS.

Class 1 (Touring Cars, unlimited).—Silver Medal: M. A. Benachi (3,300 Bugatti saloon), 31.4s. Bronze Medals: John Biro (3,300 Bugatti), 31.8s.; C. M. Needham (S.S.I.), 32.3s.

Class 2 (M. G. Midget, Magna or Magnette).—Bronze Medal: E. H. Gehlcken (Montlhéry Midget), 31.4s.

Class 3 (Wolseley Hornets).—Bronze Medal: F. S. Hutchens, 32.2s.

Class 4 (Super Sports Cars up to 1,100 c.c.).—Silver Medal: F. R. G. Spikins (Singer Le Mans), 29.4s. Bronze Medals: J. A. Driskell (1,098 B.N.C.), 29.6s.; E. H. Gehlcken (Montlhéry Midget), 31.4s.

Class 5 (Standard Sporting Cars up to 1,500 c.c.)—Silver Cup: S. E. Cummings (1,496 Frazer-Nash), 28.4s. Silver Medal: H. D. Inderwick (1,496 Frazer-Nash), 30s. Bronze Medals: H. P. Dawborn (1,496 Frazer-Nash), 30.6s.; A. S. Whiddington (Alvis Firefly), 31.8s.

Class 6.—(Sporting Cars up to 2,000 c.c.).—Bronze Medal: H. P. Dawborn (1,496 Frazer-Nash), 29.2s.

Class 7.—(Super Sporting Cars up to 1,500 c.c.).—Silver Medal: S. E. Cummings (1,496 Frazer-Nash), 28.4s. Bronze Medals: G. E. W. Oliver (1,096 Morgan), 28.6s.; F. R. G. Spikins (Le Mans Singer), 29.4s.

Class 8 (Super Sporting Cars, unlimited).—Silver Cup: F. Lycett (8-litre Bentley), 25.2s. Silver Medals: Urwin Smith (4½-litre Invicta), 26.8s.; L.Sandford 8 litre Bentley), 27.4s. Bronze Medals: G. E. W. Oliver (1,096 Morgan), 28.0 secs.; S. E. Cummings (1,496 Frazer-Nash), 28.2s.

Class 9 (Racing Cars up to 1,100 c.c.).—Silver Medal: G. E. W. Oliver (1,096 Morgan), 26.2s. Bronze Medals J. W. T. Raynes (1,089 Riley), 27.8s.; F. R. G. Spikins (Le Mans Singer), 28.4s.

Class 10 (Racing Cars up to 1,500 c.c.).—Silver Medal: R. G. J. Nash (1,496 Anzani-Nash), 22.4s. Bronze Medals: F. R. G. Spikins (Le Mans Singer), 26.2s.; J. A. Driskell (1,098 B.N.C.), 29.4s.

Class 11 (Racing Cars up to 2,000 c.c.).—Silver Medal: J. V. Bolster (1,962 Bolster Special), 23.2s.

Class 12 (Racing Cars, unlimited).—Silver Cup: R. G. J. Nash (1,496 Anzani-Nash), 24.2s. Silver Medal: L. Sandford (8 litre Bentley), 25.8s. Bronze Medals: Major A. T. G. Gardner (2,336 Alfa-Romeo), 27s.; A. G. Bainton (2,261 Bugatti), 29.4s.

Class 13 (Handicap Class).—Silver Cups: A. G. Bainton (2,261 Bugatti), handicap 8.8s., net time 21s.; F. Lycett (8 litre Bentley), handicap 2.8s., net time 21.2s. Silver Medals: R. J. G. Nash (1,496 Anzani-Nash), scratch, net time 21.4s.; A. S. Whittington (Alvis Firefly), handicap 9.4s., net time 21.6s. Bronze Medal: L. Sandford (8 litre Bentley), handicap 4.4s., net time 22s.

G.W. MOTOR CLUB.

The Spring Trial, held on May 6th, was not favoured by brilliant weather, but the rain held off all day and so things might have been a good deal worse.

There were 49 starters out of an entry of 53, and the start was given at the "George and Dragon," Marlow. The hills were in easy condition, and Marlow Bottom, Shillingridge Wood and Maiden's Grove all give little trouble. The restart test on Lew Knot, however, weeded people out a little, and 23 cars failed to retain clean scores.

The trial included an excellent speed test at Middle Culham Farm, near Henley, consisting of a slight gradient and one acute bend. Here the fastest times were

CLUB NEWS—Continued.

made by R. Yager (Talbot 105) in 31 secs., G. T. Dicks (Aero Morgan) 32.2 secs., and W. J. B. Richardson (Singer Le Mans) 32.4 secs. The finish was at the " Royal Saracens Head," Beaconsfield, but first of all the competitors had to negotiate a 30 mile route-finding contest :—

RESULTS.

Premier Awards.—E. H. Dimond (M.G. J.2), D. Maclean (M.G. Magna), Miss P. Blathwayte (M.G. Midget), J. H. Hibbitt (M.G. J.2), and W. J. B. Richardson (Singer Le Mans).

Second-class Awards.—D. Loader (Singer Le Mans), B. R. Leake (B.S.A.), H. R. Euston (Aero Morgan), C. V. Wells (Singer Le Mans), W. B. M. Fraser (M.G. Magna), H. M. L. Williams (Wolseley Hornet), A. Negal (Morris Major), J. A. Driskell (B.N.C.).

Third-class Awards.—H. H. F. Barns (B.S.A.), J. L. Fraser (M.G.), H. G. Conway (Ulster Austin), C. S. Parrott (Singer Le Mans), N. W. Mears (Singer Le Mans), G. Osborne (Salmson), F. M. Shepherd (Singer), J. F. Syme (Singer), H. J. Craxford (Morris Minor), R. B. Collie (Delage), Mrs. Vaughan (Standard), and T. Tubbs (M.G.).

Team Prize.—The Great West M.C. No. 4 team (E. H. Dimond, D. Maclean and J. H. Hibbitt, all driving M.G.s).

HARROW CAR CLUB.

The activities for the season of the above Club are as follows :—

June 3.—Captain's Trial.
,, 17.—Speed judging contest.
July 1.—Reliability trial.
,, 15.—Speed trials.
,, 29.—Treasure hunt.
Aug. 12.—Speed trials.
,, 26.—All day trial.
Sept. 9.—Speed trials.
,, 23.—Chiltern trial.

The Hon. Secretary is Mr. D. Bumford, Kynaston Court, Box Tree Road, Harrow Weald, Middlesex.

THE MOTOR SPORT CORRESPONDENCE CLUB.

A census was recently taken of all members' opinions as to which are the world's 12 best cars, and the following are the eagerly awaited results :—

1, Bentley, 212 points ; 2, Alfa-Romeo, 200 points ; 3, Bugatti, 161 points ; 4, Mercedes, 145 points ; 5, Rolls Royce, 143 points ; 6, M.G., 106 points ; 7, Maserati, 102 points ; 8, Delage, 61 points; 9, Lagonda, 60 points ; 10, Frazer Nash, 48 points ; 11, Hispano, 47 points ; 12, Talbot, 34 points. Invicta, Sunbeam, Aston-Martin, Daimler, Miller, Isotta and Riley all tied for 13th place with 28 points each. A similar census is to be taken of the 12 best living drivers, so send in your lists, in order of merit please. All those interested should apply to The Hon. Secretary, Lewis E. Miles, 4, High Street, Fordington, Dorchester, Dorset.

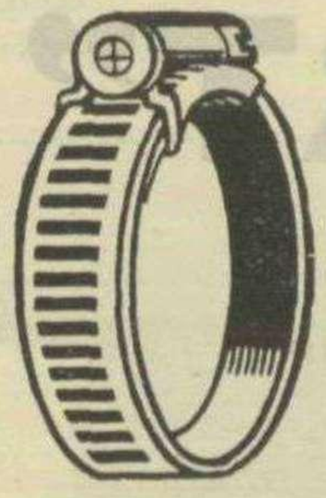
TALBOT OWNERS' CLUB.

At the last Committee meeting the Secretary reported a large number of applications for membership. A suitable badge is being selected and the date of the first fixture has been confirmed. It will be held on Sunday, June 3rd, and will take the form of a reliability trial in the Chilterns, starting at Beaconsfield and ending at the Howard Park Hotel, Aston Clinton. After tea a speed trial will be held in the private grounds of the hotel. Those interested should get in touch with the Hon. Secretary, Mr. S. W. Mason, c/o Messrs. Clement Talbot, Ltd., Barlby Road, Ladbroke Grove, W. 11.

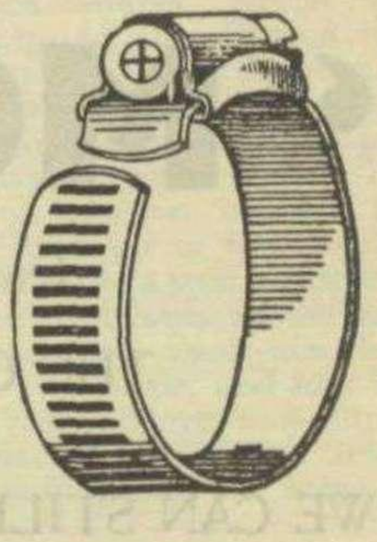
The Editor invites Club Secretaries to send details of their fixtures, sporting and social, for publication in these columns. These items should be sent to reach this office not later the 16th of the month.

JUBILEE WORM-DRIVE CLIPS

THE BEST POSSIBLE TO GET



MAKE SURE YOU HAVE THEM FITTED ON YOUR RADIATOR JOINTS, LEATHER COVERS, ON UNIVERSAL JOINTS, AIR, OIL & WATER HOSE JOINTS.



ALL IN ONE PIECE.
EASY TO FIT.

NO PARTS TO LOSE.
GUARANTEED NEVER TO LEAK.

A KEEN MOTORIST WRITES : *" I cannot understand anyone using any other pattern, as yours are the last word in satisfaction and efficiency."*

STOCKED BY ALL GARAGES & ACCESSORY DEALERS.

MANUFACTURERS :
L. ROBINSON & Co.,
2, London Chambers, GILLINGHAM, KENT.



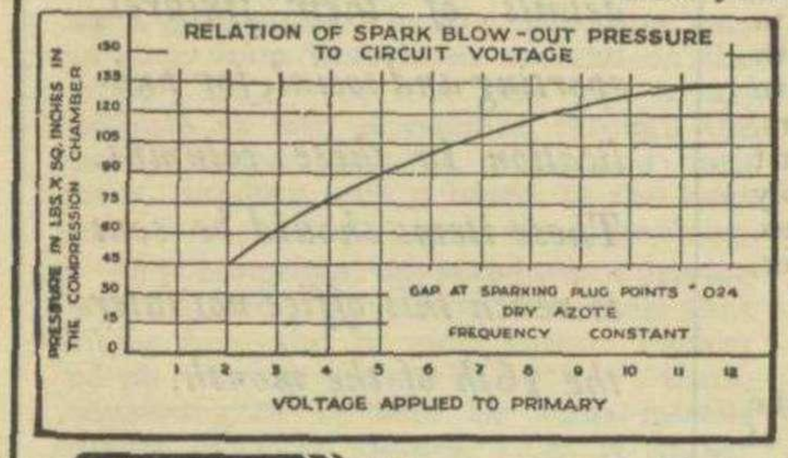
MARCHAL

Something new—
Something better

A closed magnetic circuit of low losses: a primary of very feeble inductance: a regulating resistance of special material: a secondary of small ohmic resistance and great number of turns. A well designed 12 volts ignition coil should run your engine on only 4 volts: mean current consumption 1·25 amps. at 12 volts.

Does your coil do that?

Fit a Marchal and improve acceleration and R.P.M.



Supplied in 6 or 12 volts.

Immediate starting even with a run-down battery from cold.

Price **50/-**

Quality Counts

ELECTRICAL EQUIPMENTS.
C. Desiderio,
143, Whitfield St. London W.1.

'Phone: Museum 7946 'Grams: Desiderio, Eusroad, London.
Manchester Depot.—Burdett Bros., Deansgate, Manchester.



The use of
RUNNING-IN COMPOUNDS AND UPPER CYLINDER LUBRICANTS containing

Acheson Colloidal Graphite

ensures the formation of adsorbed Graphoid Surfaces on the Working parts

and thus enables the lubricating oil to spread more readily. Tendency to seizure is also reduced and maximum power output under cooler running conditions obtained.

A list of companies marketing Compounds containing Acheson Colloidal Graphite —— will be supplied on request. ——

E·G·ACHESON. LTD.
THAMES HOUSE.
MILLBANK, LONDON, S.W.1.
TELEPHONE: VICTORIA 5646

CLOTH BOUND EDITIONS OF VOLUME IX

OF

"MOTOR SPORT"

(contains all the issues from November, 1932—October, 1933.)

THE CHARGE FOR THIS VOLUME IS 12/6 (postage 9d. extra).

WE CAN STILL SUPPLY THE FOLLOWING FROM STOCK:

Volume 3 at £1 - 1 - 0 Volume 4 at £1 - 1 - 0
Volume 6 at 15/- Volumes 7 and 8 at 12/6

(Postage on each of the above is 9d. extra.)

MOTOR SPORT (1929) LTD.,
39 VICTORIA STREET, LONDON, S.W.1

FIRST E.R.A. RACING CAR COMPLETED

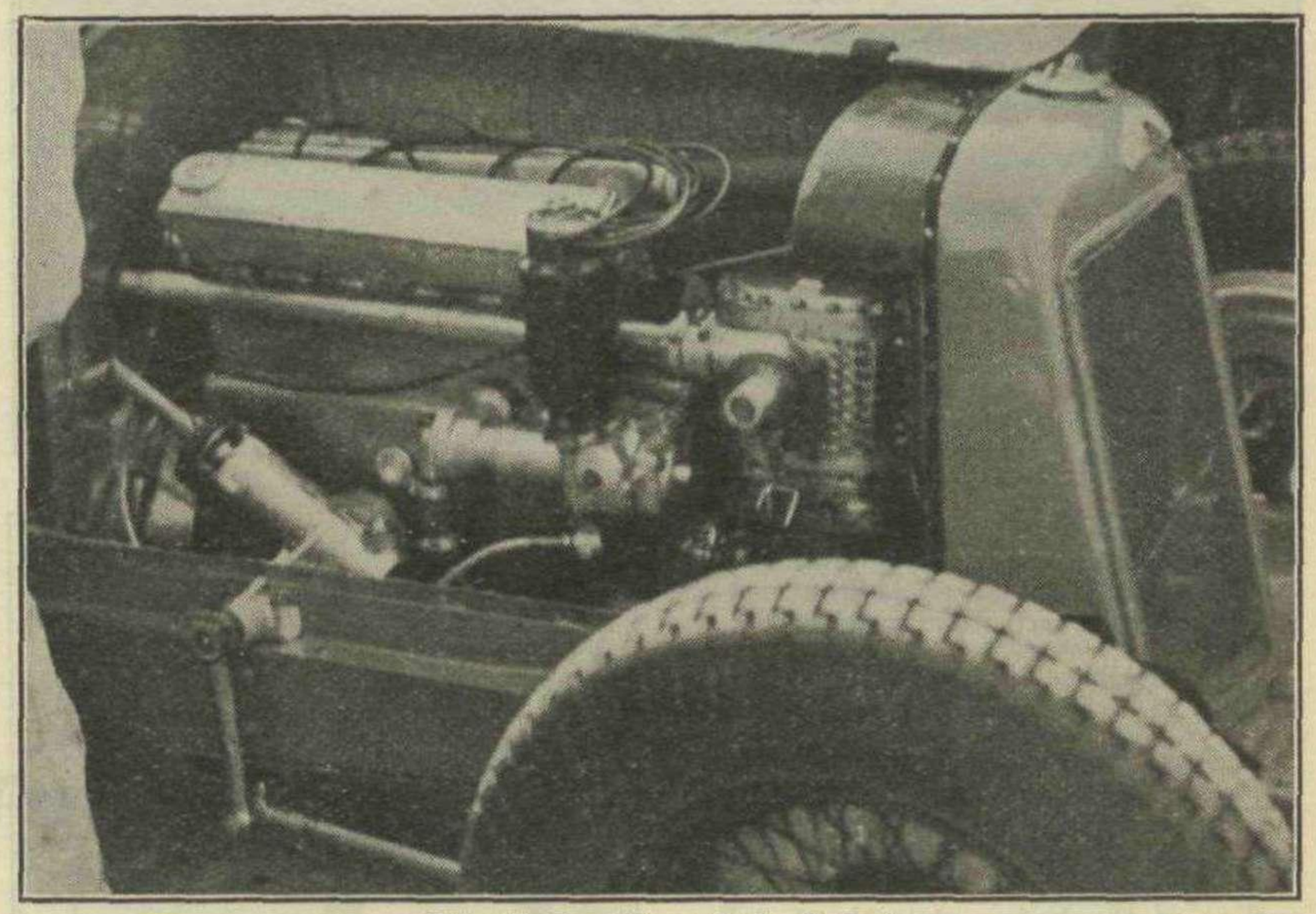
RAYMOND MAYS AND H. W. COOK PLAN AN EXTENSIVE PROGRAMME.

ALL British racing enthusiasts must have cherished a hope to see a team of cars from this country competing in foreign Grand Prix events, but last year, at any rate, the possibility seemed fairly remote. The success of the supercharged Riley driven at Shelsley last autumn by Raymond Mays was destined to be the starting point of one enterprise of this nature, and with the financial support of Humphrey Cook, whose name has so often been associated with projects for reviving British racing prestige abroad, a company called English Racing Automobiles, Ltd., was formed to undertake the construction of cars based on this design. After the usual delays the first car has just been completed, and will make its début in the Isle of Man Round the Town races.

The engine is based on the six-cylinder 1,458 cc. Riley unit, which has a bore of 57 mm. and a stroke of 95.2. The cylinder block, which is a steel casting, is similar to the standard Riley and is in unit with the top of the crank-case. The aluminium head is an entirely new production. The valves are set at 90 degrees to one another in a hemispherical head, and are operated by Riley-type rockers and short push-rods from the cam-shaft on each side of the engine. The valves are approximately 1½ in. in diameter, and the exhaust valve is hollow and filled with a special salt which encourages heat flow from the head. 14 mm. plugs are used.

The three-bearing fully balanced crank-shaft is most massive in appearance, and is carried in three bearings, rollers being used in the centre. The connecting rods are steel, with cast-in big ends, and the pistons are of the slipper type with three rings.

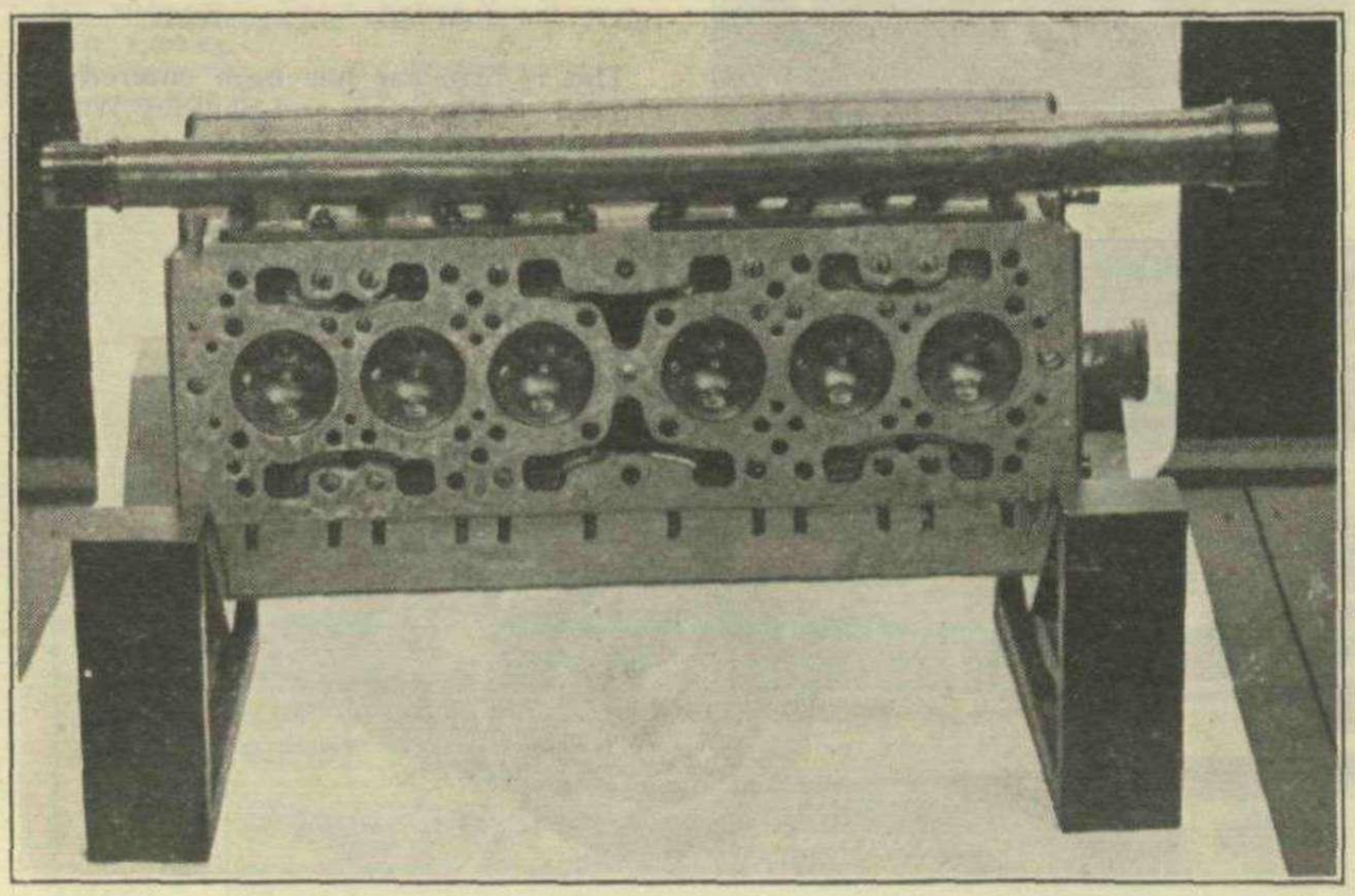
A two-vane Murray Jamieson super-charger is mounted vertically in front of the engine, and driven by bevel gears from the crank-shaft. A single S.U. carburetter is used, pressure fed from the rear tank. Dry-sump lubrication is employed and the double pump is mounted below the crank-shaft, worm driven. A vertical Scintilla magneto is carried on the off-side of the engine.



The Engine View of the E.R.A.

The rear end of the engine is bolted to an elektron housing, which also acts as a chassis bracing.

A 15 h.p. Armstrong-Siddeley self-changing gear-box is secured to the rear side of this housing, with a cable-operated lever on the dash. The propellor-shaft is enclosed in a torque tube, with a bevel-driven back axle.



The aluminium cylinder-head of the new E.R.A. The inlet manifold is uppermost.

The chassis was designed by R. W. Railton, and was made by Thomson and Taylors. It is straight in front and swept over the rear axle. In front it is braced by a light box-member behind the radiator, amidships by the elektron rear engine support and by a dash of the same material, and by two light cross-members at the back, diagonally trussed by a pair of well-drilled channel-section stays. The front anxle is of I-section between the springs, and is solid up to the steering pins. The rear axle has a split aluminium centre casing and steel tubes for the half-shafts. Two Hartford shock-absorbers are used for the front axle, and four are fitted at the rear. Short half-elliptic springs with shackles, back and front, are used, and radius rods are fitted to the front axle.

The petrol tank is pivoted at the rear and rests on two rubber blocks in front. It holds 23 gallons.

The brakes have large ribbed elektron drums, and they are operated on the Girling system, with its straight rods and high mechanical efficiency.

Burman steering is used, with an off-set box bolted to the side of the chassis, and the column has a universal joint at the bottom, Bugatti fashion, and is supported by a bearing in the dash.

Large section Dunlop tyres are fitted, with a new " S " pattern tread. Marked

FIRST E.R.A. RACING CAR COMPLETED—continued.



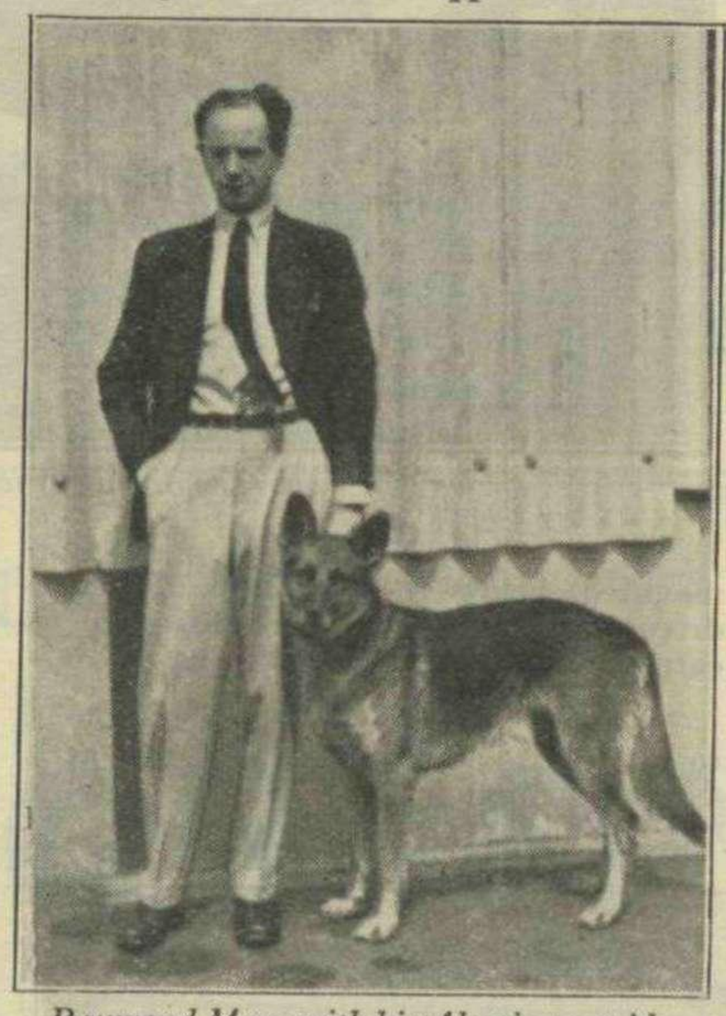
The Finished Article. The E.R.A. Racing Car as it now appears.

" 16 by 6.00 " they are mounted on wide rims, and are fully 6 in. across. This new departure is made with the idea of obtaining increased road adhesion.

The wheelbase is 7 ft. 10 in. and the track 4 ft. 3 in., and the cars complete.

The cars are single seaters and the body-work consists simply of light aluminium panels secured to the chassis through small brackets. A long louvred bonnet is used, and the fuel tank forms the rear outline of the body, while the 5 gallon oil tank is similarly faired into the under-shield. From the side the cars bear a resemblance to the single-seater Maseratis, but with a distinctive radiator cowling. The team colour will be an attractive shade of light green.

The design of the cylinder head, the crank-shaft and the modifications necessary for installing the blower, together with the general chassis layout are the work of Mr. Peter Berthon. He has long been associated with Mays in his supercharging experiments, notably the Vauxhall-Villiers. This remarkable three-litre car, based on the old T.T. Vauxhall which once belonged to Cook, develops 260 h.p. and revs. to 6,000 r.p.m., with a stoke of 132 mm.!



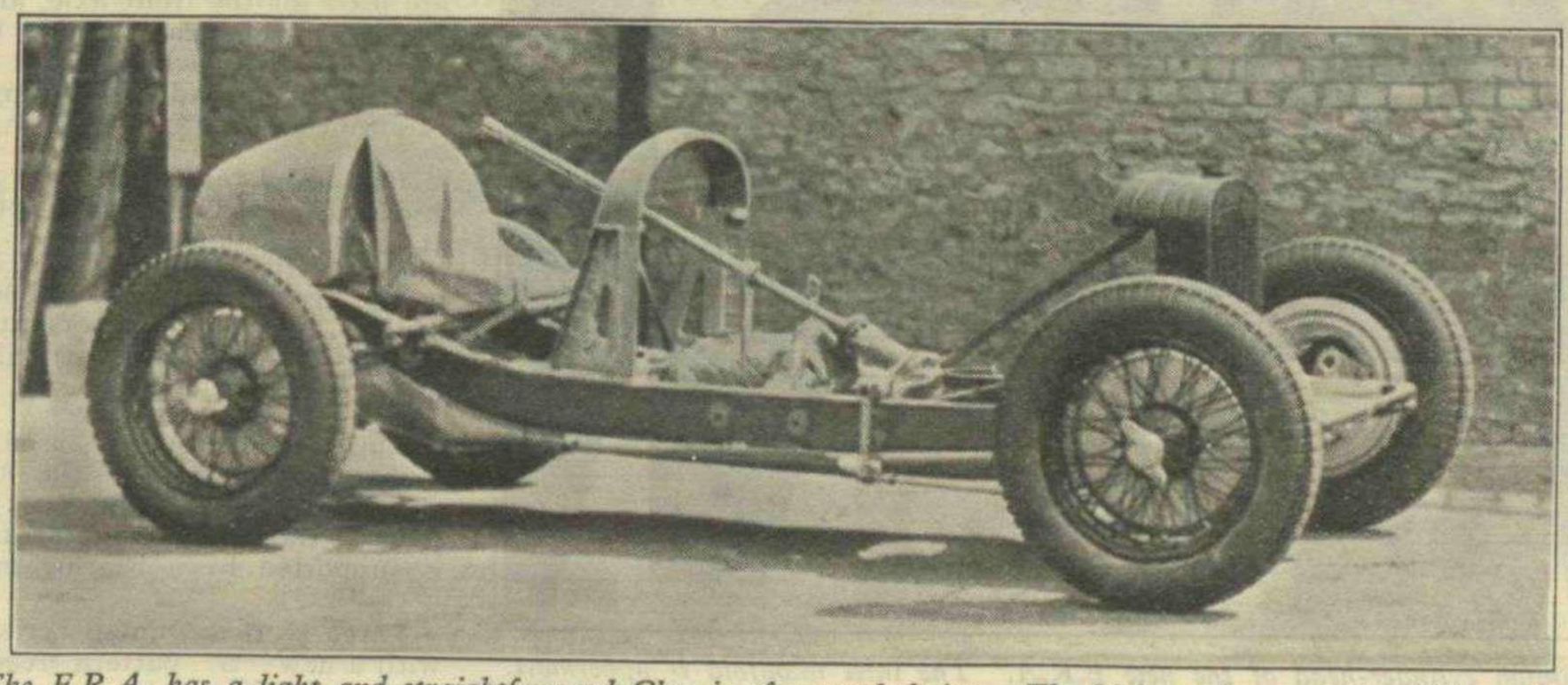
Raymond Mays with his Alsatian outside the E.R.A. Headquarters at Bourne.

The cars are being built at Raymond Mays' racing workshop in Lincolnshire, which is equipped with lathes, milling machines, grinders, a heat-treatment furnace, and most treasured possession, a Heenan and Froude dynamometer, running up to 8,000 r.p.m. A fine drawing office and stores have just been completed, and in short what is now the works of the E.R.A. is equipped in every way for the manufacture of racing cars. The workmanship which was being put into the chassis under construction one might fairly term exquisite.

It is intended to make the E.R.A.s in three capacities, 1,100 c.c., 1,500 c.c., and two litre. The first will be obtained by reducing the throw of the crank-shaft, while the cylinder-block will be bored out to give the largest capacity. The 1,500 c.c. engines gives over 160 h.p. at 7,000 r.p.m., only 20 h.p. less than that of the 2 ·3 Grand Prix Alfas of a year ago. It runs on Shell racing fuel, on a 6 to 1 compression, with 15 lbs. blower pressure.

Discussing the cars with Mr. Mays, he confirmed our impression that they were intended for Grand Prix racing and not simply for hill-climbs, which, of course, have been his speciality for the last ten years. " Nearly all the Continental races have a class either for 1½ or two litre cars, so there will be plenty of scope for the E.R.A.s. The appalling expense of constructing new engines, and the fact that the original motor has shown no signs of distress after all the tests to which it has been subjected made us think that we were justified in building a racing car round it. If all goes well, we may think of a three litre straight-eight in a year's time." He agreed that there was a market for an English produced racing car and that the Company would be able later on to cater for this demand, but for the present the dozen mechanics were working night shifts to get the team cars ready for their first engagements.

The 1½-litre car has been entered for the Isle of Man races and Shelsley Walsh, and the first 1,100 c.c. model should be finished in time for the latter event.



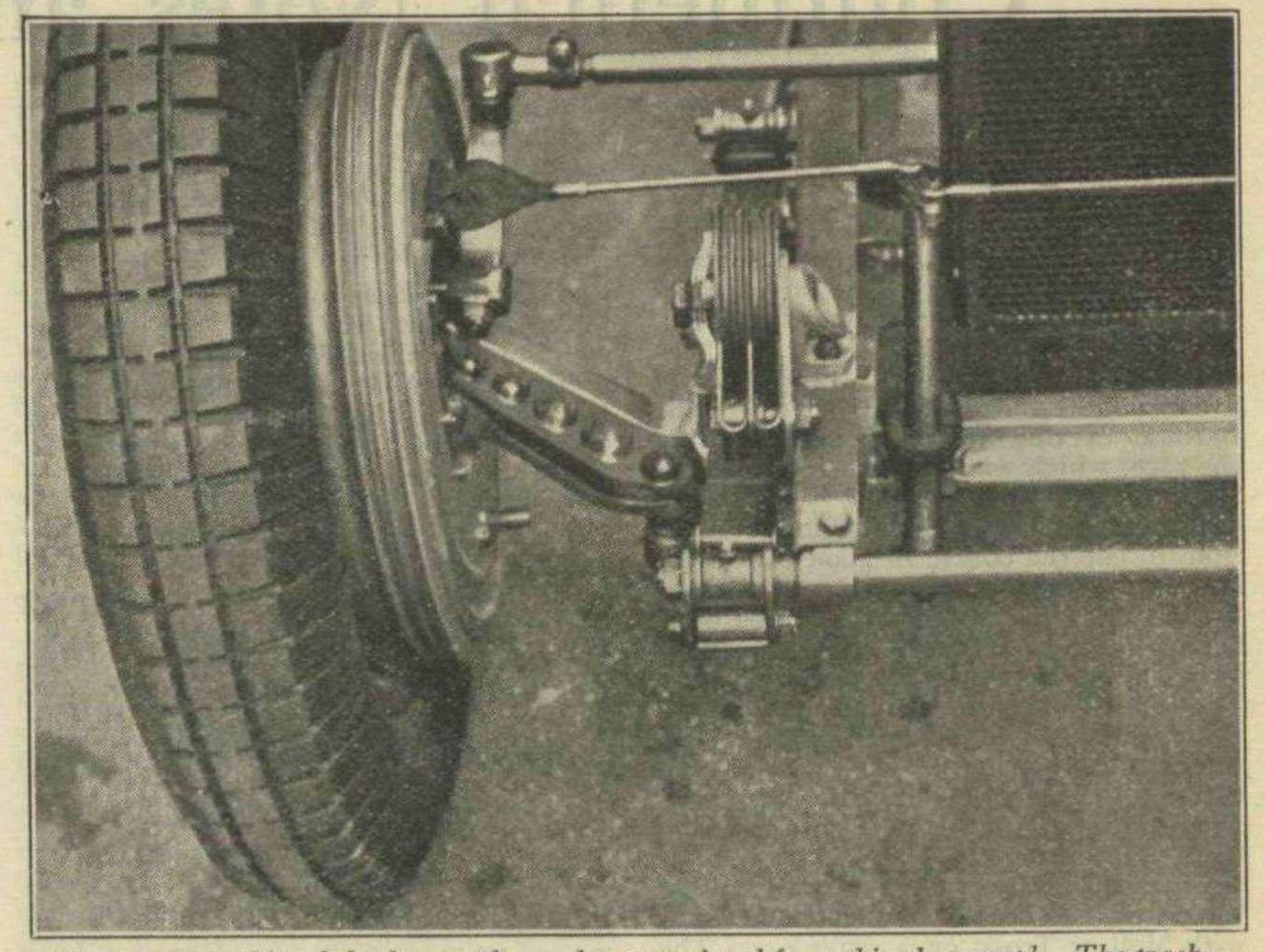
The E.R.A. has a light and straightforward Chassis of normal design. The high seating position will be noticed.

FIRST E.R.A. RACING CAR COMPLETED—continued.

These two cars and the 2-litre have also been entered for the British Empire Trophy on June 23rd. If no unforeseen snag occurs, some of the cars may be run at Dieppe in July, while next year Mays hopes to take part in the Monaco Grand Prix. He will, of course, be driving in all the events given above, and Cook will also take a wheel in some of the races. The other drivers have not yet been decided upon.

This courageous attempt to produce an English-made racing car will be supported by the good wishes of all followers of motor sport, and the first appearance of the new car in the Isle of Man will be keenly awaited.

The 1½-litre was completed just before Whitsun, and on the following Tuesday was taken down to Brooklands in the Company's Leyland van, which can carry three cars and also provides sleeping accommodation for the mechanics. The engine was brand-new, and tests were confined to driving slowly round the track and checking over oil-pressure and similar matters. The "équipe" returned to Bourne, the same night and the engine was put on the bench to complete its period of running-in.



The workmanship of the front axle can be appreciated from this photograph. The track-rod is carried above the side members.

BRITISH EMPIRE TROPHY

AN imposing list of entries, 51 in all, has been received by the B.R.D.C. for the British Empire Trophy, which takes place on Brooklands Track, on June 23rd. Here the nominations received up to May 24th are as follows :—

Class H. 750 c.c.

M.G. Midget (S)	W. G. Everitt.
M.G. Midget (S)	A. R. Samuel.
Austin (S)	Sir Herbert Austin, K.B.E.
Austin (S)	W. L. Thompson.
M.G. Midget (S)	S. F. Wilson.
Anderson Special (S)	K. M. G. Anderson.
M.G. Midget (S)	G. H. S. Balmain and J. G. C. Low.
M.G. Midget (S)	E. R. Hall.

Class G., 1,100 c.c.

Appleton Special	R. J. W. Appleton.
M.G. Magnette (S)	G. F. A. Manby-Colegrave.
M.G. Magnette (S)	G. E. T. Eyston.
M.G. Magnette (S)	G. E. T. Eyston.
M.G. Magnette (S)	G. E. T. Eyston.
M.G. Magnette (S)	P. L. Donkin.
M.G. Magnette (S)	Roy Eccles.
M.G. Magnette (S)	Geo. Hartwell, Ltd.
Riley	F. W. Dixon.
M.G. Magnette (S)	Kaye Don.
M.G. Magnette (S)	Kaye Don.
M.G. Magnette (S)	Kaye Don.
Riley (S)	W. A. Cuthbert.
Riley	J. Eason Gibson.
E.R.A. (S)	H. W. Cook.
M.G. Magnette (S)	H. C. Hamilton.
Alta (S)	D. L. Briault.
M.G. Magnette (S)	J. H. Bartlett.
Riley	H. G. Dobbs.
Crossley	R. Morgan.
Riley	A. F. Ashby.
Riley (S)	E. K. Rayson.
Amilcar (S)	R. F. Oats.
M.Q. Magnette (S)	Whitney Straight.
M.G. Magnette	R. T. Horton.

Class F, 1,500 c.c.

Riley	Victor Riley.
E.R.A. (S)	H. W. Cook.
Riley	F. W. Dixon.
Riley	F. W. Dixon.

Class E, 2,000 c.c.

Bugatti	John Houldsworth & Co.
E.R.A. (S)	H. W. Cook.
Bugatti	A. Esson-Scott
Bugatti (S)	R. O. Shuttleworth
Singer	A. W. Fox.

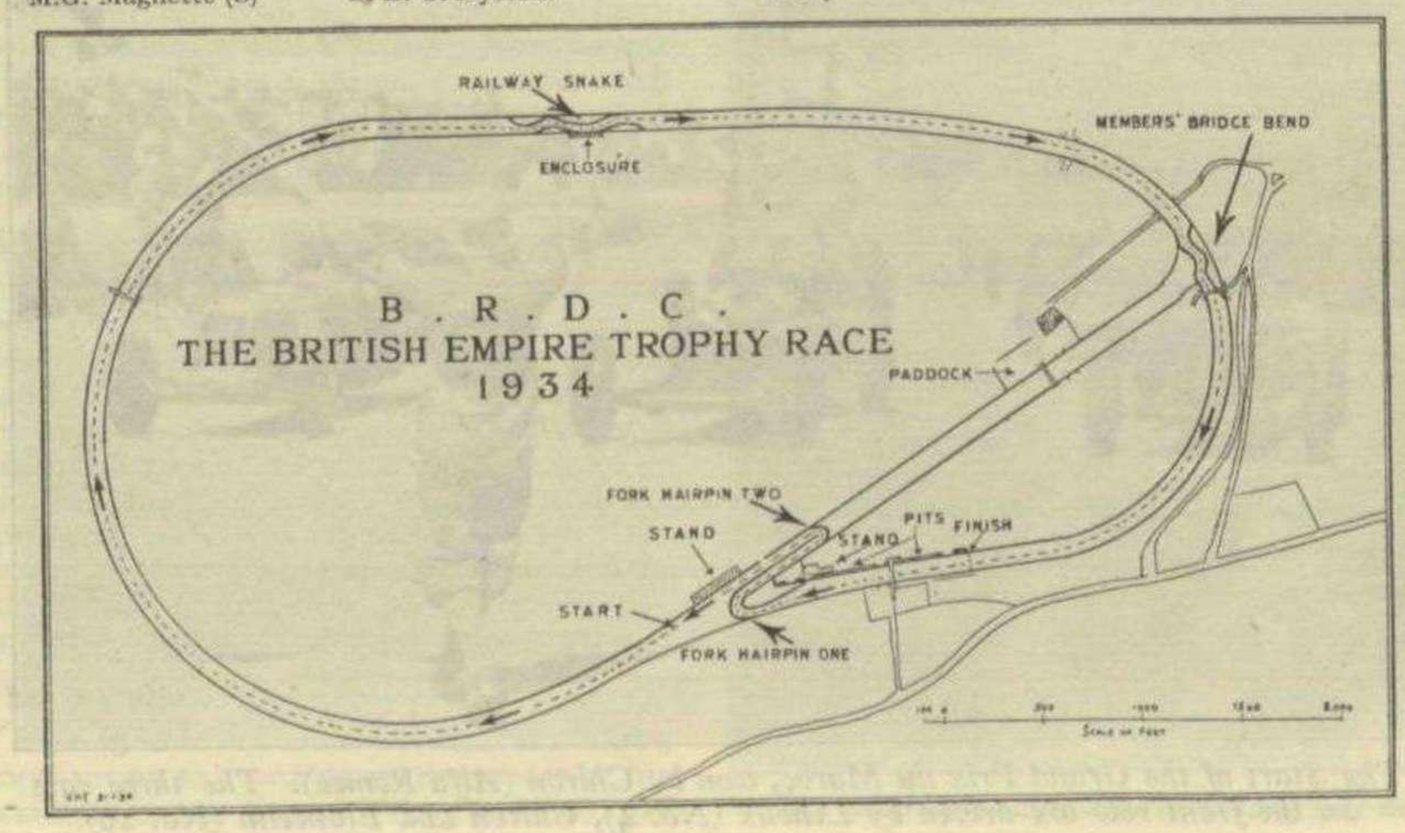
Class D, 3,000 c.c.

Bugatti (S)	T. A. S. O. Mathieson.
Bugatti (S)	A. H. L. Eccles.
Maserati (S)	Noel Rees & A. W. Fox.
Alfa-Romeo (S)	Kaye Don.
Maserati (S)	Whitney Straight.
Maserati (S)	Whitney Straight.
Alfa-Romeo	John Cobb.
Bugatti (S)	Lord Howe.
Bugatti (S).	T. E. Rose-Richards.

As will be seen, the majority of entries are in the 1,100 c.c. category, with Magnettes, including Eyston's and Kaye Don's team, R. T. Horton's single-seater, and Manby-Colegrave's fast car as the most favoured make. Three E.R.A.'s of varying capacity will be running, while the 3-litre class includes the majority of England's Grand Prix cars and drivers. Straight's second Maserati will be the 2.5-litre car.

The race consists of 100 laps of the special 3 mile road course, and cars are handicapped according to capacity and whether they are supercharged or not. The handicap speed for a supercharged 750 c.c. is 81.82 m.p.h., while the supercharged 3-litres have to average 90 m.p.h. The small cars start at 2 p.m., and the entire field will have been dispatched by 2.20.

Lord Nuffield has donated £1,000 to the prize fund and the entrant of the winning car will receive the British Empire Trophy and £400.



Continental Notes and News

By

HAROLD NOCKOLDS.

Preparations for the Swiss G.P.

ALTHOUGH hill climbs have been very popular throughout Switzerland for many years, road races over a fixed circuit have seldom been held. This year, however, the Swiss A.C. has decided to hold the first Grand Prix of Switzerland, and has entrusted to the Bernese Section the task of organising the race, which will take place on August 26th.

Preparations have been in hand for some time to get the course in good condition, and in this the authorities were helped by the fact that motor-cycle races have been held there in the past. Permanent grandstands have now been constructed. The road runs through the Forest of Bremgarten, and the surface has been completely re-made. The old road ran through a village, but this has been avoided by means of a by-pass, making the length of the lap 7 km. 280.

Entries so far consist of Chiron and Varzi on Ferrari-owned Alfa-Romeos, with Moll or Trossi on a sister car. The Siena stable will be represented by Sofietti and Minozzi on Maseratis, Balestrero and Biondetti will appear for the Gruppo San Giorgio stable; Straight will be there with Hamilton on Maseratis, Ruesch and Maag will drive similar cars, and Earl Howe will drive another Maserati.

There will also be a race for 1,500 c.c. machines, and in this Earl Howe will pilot the Delage, which is now fitted with a Wilson self-changing gear-box. His chief opponent will be Hans Kessler on one of the new 1,500 c.c. Maseratis.

The prize money for both races is extremely generous, being 15,000, 10,000, 5,000 Swiss francs for 1st, 2nd and 3rd in the large race, and 3,000, 2,000 and 1,000 francs for the small cars.

The 48-Hours' Record Broken Again.

The attention of French manufacturers seems to be riveted on the world's 48 hours' record. First of all the aero-dynamically-streamlined 2 litre Hotchkiss broke the existing record of 94.40 m.p.h. (made by a 1,750 c.c. Alfa-Romeo) with a speed of 95.63 m.p.h. The drivers were Eyston and Denly.

A few weeks' later a 4,800 c.c. Renault appeared at the track, and in the hands of Quatresous, Fromentin, Berthelou and André Wagner set up a new figure of 104.05 m.p.h., a very fine performance.

Finally, on May 8th, a new attacker was wheeled out at Montlhéry, namely a 3,227 c.c. 6-cylinder Delahaye. The drivers were Albert Perrot, Marcel Dhome and Armand Girod, and the car was prepared under the guidance of M. Jean François. All went well for 15 hours, the car maintaining an average speed of about 112 m.p.h. Then came a misfortune which might have had a serious effect on the chances of the Delahaye beating the 48-hour record. The holding down bolts of the petrol tank shook loose, with the result that the fuel began to leak away rapidly. The only solution was to make use of the small reserve tank, and this was done, but the car could only run for 55 minutes now instead of the three hours with the main tank. However, the frequent practice of filling up the reserve made the mechanics so quick that this was done regularly in 20 seconds.

The rest of the run was uneventful, and the car completed the 48-hour run at an average speed of 107.685 m.p.h., handsomely beating the previous figure. This encouraged those in charge of the car to continue the record attack, the objective this time being the 10,000 kilometres, previously held by Marchand's Voisin at 91.9 m.p.h. This was at last taken with a speed of 105.3 m.p.h. Here is the full list of records :—

WORLD'S RECORDS.

4,000 miles 110.40 m.p.h. (Renault 105.59 m.p.h.).
5,000 miles 109.89 m.p.h. (Renault 104.05 m.p.h.).
48 hours 109.54 m.p.h. (Renault 104.05 m.p.h.).
10,000 km. 104.72 m.p.h. (Voisin 91.41 m.p.h.).

CLASS C. RECORDS.

12 hours 114.14 m.p.h. (Delage 112.09 m.p.h.).
3000 km. 111.65 m.p.h. (Renault 106.33 m.p.h.).
2,000 miles 111.63 m.p.h. (Renault 106.13 m.p.h.).
4,000 km. 111.40 m.p.h. (Renault 106.17 m.p.h.).
24 hours 111.35 m.p.h. (Renault 106.21 m.p.h.).
3,000 miles 110.86 m.p.h. (Renault 105.73 m.p.h.).
5,000 km. 110.81 m.p.h. (Renault 105.85 m.p.h.).
4,000 miles 110.40 m.p.h. (Renault 105.59 m.p.h.).
5,000 miles 109.89 m.p.h. (Renault 104.05 m.p.h.).
48 hours 109.54 m.p.h. (Renault 104.05 m.p.h.),
10,000 km. 104.72 m.p.h. (Austin 84.28 m.p.h.).

Dunlop tyres were used for the run, and gave complete satisfaction.

Some More Stables.

The system of several drivers getting together and pooling their resources seems to be a popular one, for several new " stables " have recently been formed. The first is in Paris, and is known by the title of "Ecurie Cazaux." It is headed by Robert Cazaux, the owner of a 2.3-litre Bugatti, which has been seen at the Château Thierry hill climb, and other French events. The remaining cars are a 1,500 c.c. blown Bugatti, owned by Césure and a 2-litre Bugatti, which is the property of Roumani.

In Spain the two drivers Conde de Villapadicona and Joaquin Palacios, have teamed up for the racing season. The cars at their disposal are two monoposto Maseratis and an Alfa-Romeo. They intend to take part in road-races in France, Spain and North Africa.

From Italy comes news of the " Gruppe Genovese." This is a larger affair than the other two, the drivers being Luigi Beccaria, Attilio Batilana, Raffaele Toti, Pietro Cattaneo, and Guglielmo. The cars of the stud are two Alfa-Romeo 2,300 c.c., 2-seaters, two Alfa-Romeo 4-seaters, one 2-litre Alfa, a Maserati, and an M.G.

Herr Fritsch Injured.

Organiser of the race meetings at the Nurburg Ring, and Vice-President of the German Automibile Club, Herr Fritsch is well-known to all followers of motor-racing. I am sorry to report that he has recently met with a serious accident while motoring on the Avus Road. Herr Fritsch suffered a fractured skull, which necessitated the trepanning operation being carried out. While I write comes the news that his condition is still serious.

Three More Races Cancelled.

To the growing list of races which will not be held this year must be added the Grand Prix de la Baule, the French " Southport," the Grand Prix of Budapest, and the Grand Prix of Lwow. The



The Start of the Grand Prix du Maroc, won by Chiron (Alfa Romeo). The three cars in the front row are driven by Lehoux (No. 4), Chiron and Etancelin (No. 16).

CONTINENTAL NOTES AND NEWS—continued.

organisers of the Nice Grand Prix, however, are of the opinion that "it's an ill wind," for their race is fixed for the same day as the cancelled La Baule G.P., which would have unavoidably entailed a clashing of entries. The Nice race by the way, will be run over 100 laps, giving a total distance of 321 km. 400.

Chiron's Busy Month.

Louis Chiron does not believe in doing things by halves. In the month of July his engagements are as follows:—1st, Grand Prix de l'A.C.F., at Montlhéry; 8th, Grand Prix de la Marne at Rheims; 15th, Grand Prix of Germany, at Nurburg Ring; 22nd, Grand Prix of Dieppe; 29th, Grand Prix of Belgium, at Spa.

Well, well!

German Driver Killed.

Charlie Jellen, the German racing driver, was killed last month while practising on the road near Ingoldstadt He overturned on a corner and died from a fractured skull.

Twenty-five years of age, Jellen was born at Graz, afterwards living at Munich. He made his racing début on a Bugatti, but last year he bought a Monza-type Alfa-Romeo, with which he raced in the Nice Grand Prix. Probably the best performance of his career was when he finished second in the 3-litre sports class at the Klausen hill climb behind the great Nuvolari. In the Avus Grand Prix last year he was fourth behind Varzi, Czaikowski, Nuvolari and Borzacchini.

Von Stuck and Benoist to Attack Montlhéry Lap Record.

I am able to announce that in the near future, an attempt will be made by Robert Benoist to beat Mrs. G. M. Stewart's lap record of Montlhéry track. Benoist will drive a 4.9 litre Bugatti, and he has hopes of raising the record, which now stands at 145.9 m.p.h., to the region of 150 m.p.h. Another contender for the honour is Hans von Stuck, who recently visited the track for the first time. His car will be the Auto Union.

A Bugatti Recruit.

The name of V. Marret has appeared regularly for the past few years in the programmes of various small French races and hill climbs. His mounts have been a Salmson and a Miller. Now he has "graduated" to a larger car, and with the 2.3 litre Bugatti he has just acquired he hopes to compete in many events this summer.

Death of Georges Sizaire.

Last month marked the death of a man well known in French motoring circles, Georges Sizaire. In partnership with his brother Maurice, Georges Sizaire was responsible for the Sizaire-Naudin and Sizaire-Berwick cars, and he was a pioneer in the design of independent-springing. He was equally famed for his racing performances, having competed in the French Grand Prix, the Targa Florio, and the Circuit of Dieppe among others.

The Invalids.

I am glad to say that Nuvolari is making good progress towards recovery after his accident in the Grand Prix Bordino. He is convalescing at his home at Bergamo, and although his broken leg is still in plaster, no complications are feared. It is unlikely that he will be seen at the wheel for two or three months, although he has been cherishing a desire to take part in the Avus race with the 16-cylinder Maserati. His health has not been improved by a good deal of worry about his son, who has been seriously ill.

Taruffi, who had a sensational crash when leading the field in the Tripoli Grand Prix, is still in hospital. He has been found to have five ribs broken, to say nothing of an injured arm, so that his prospects of racing again this season are none too bright. With Nuvolari also *hors de combat*, the Maserati factory has lost two of its best exponents.

The Nacional Pescara in Action.

After an absence from hill climbing for two years, the Nacional Pescara car was seen in action last month at three small French events. In the Val de Cuech hill climb the Spanish car was beaten by J. Rolland's Bugatti; a few days later it fared better at the Alpilles hill climb, but did not beat the record for the hill. Three days later at the Mont Faron hill climb, the Nacional Pescara was again successful, this time beating the existing record for the hill.

Writing of the Val de Cuech hill climb reminds me that a monument has been erected there in memory of Toselli and his mechanic Jacques Pelletrau, both of whom were killed while practising for the climb last year.

An Impressive Ceremony.

The unveiling of the monument in memory of Guy Bouriat and Louis Trintignant was one of the most impressive of its kind ever carried out in motor racing history.

A large attendance of mourners gathered at the Mons-en-Chaussée corner which is the site of the monument, and a mass was said in the open air. Then speeches were made and many wreaths placed on the stone. While this was going on an aeroplane circled overhead at a low attitude, the pilot dropping a wreath near the memorial. It was Michel Doré, and he was followed by members of the Aero Club de Péronne.

A Dead-Heat After 24 Hours!

At the end of 24 hours single-handed driving in the Forest of St. Germain, two cars dead-heated for first place in the Bol d'Or on May 20th and 21st. They were an M.G. Midget, driven by Maillard-Brune, and a special car, the Chevallier, in the hands of its constructor.

The race is open to cars of various capacities, divided into classes, with the premier award going to the car which covers the greatest distance, irrespective of class. The Bol d'Or is famed for attracting the home-made cycle-car, and many of the drivers put to the test the hopes and hard work of a year in this way. By the rules of the race one driver has to be at the wheel for the whole of the 24 hours, so that the strain on physical endurance is considerable.

The start was given at 6 o'clock, 36 cars coming to the line. From the very beginning the pace was fast, and this caused a good many retirements. Among the noted drivers to withdraw was Arthur Duray, whose Amilcar was strongly fancied to win.

For some time the lead was held by Blot on an 1,100 c.c. Amilcar. In fact all through the night, and for three-quarters of the race, Blot was ahead, until mechanical trouble forced him out. His place was taken by Lemaître, on an 1,100 c.c. E.H.P., but the latter did not taste the fruits of leadership for long, being passed by Poulain on another Amilcar.

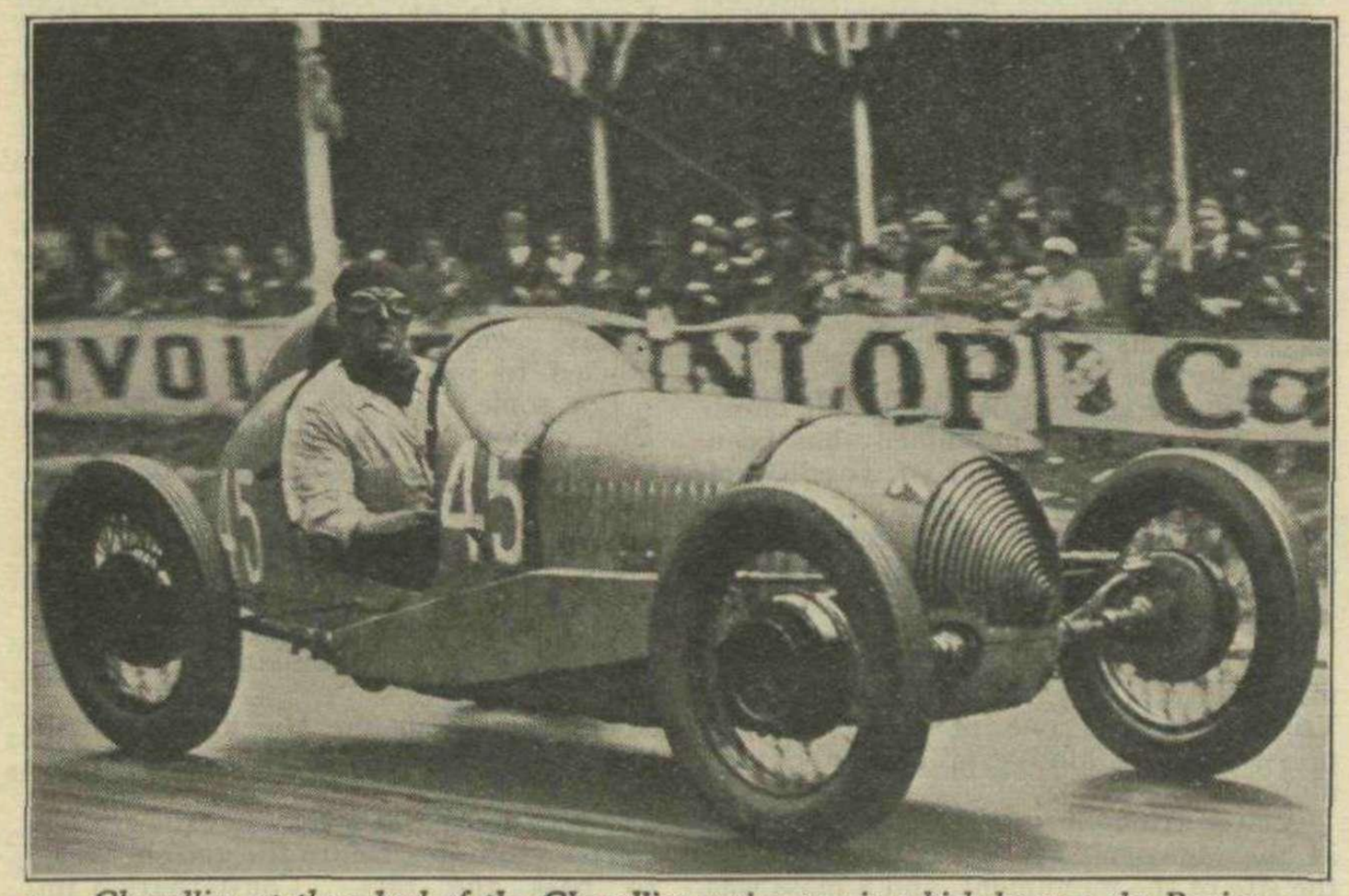
Three hours before the finish Poulain had to retire, and Chevallier went into the lead with his Chevallier racing car. The race looked safe for Chevallier when, thirteen minutes before the end, he failed to pass the pits. Consternation immediately reigned, and the news came through that his car had stopped on the far side of the course with a broken valve.



The 36 drivers commence their long ride in the Bol d'Or held in the Forest of St. Germain.

CONTINENTAL NOTES AND NEWS—continued.

The situation now assumed a most interesting complexion. Maillard-Brune with his M.G. Midget was gradually reducing the distance between his car and the stranded Chevallier. Three minutes before the 24 hours were completed he set out on the extra lap which would place him clearly ahead of his rival. By the rules of the race he had to get one whole lap in front if he were to be pronounced the victor. The seconds ticked by, and the spectators waited in tense excitement. But Maillard-Brune just failed to do it, and crossed the line 10 seconds after the 24 hours were over. Thus the race was declared a dead heat between Chevallier (Chevallier) and Maillard-Brune (M.G.) these two being on the same lap at the expiration of the time limit.



Chevallier at the wheel of the Chevallier racing car in which he won the Racing 1,100 *c.c. class in the Bol d'Or.*

Results.

Cyclecar 500 c.c.
1. Berthelon (Rénaud), 1,212 kms. 200.
2. R. Colin (Colin), 1,065 kms. 900.

Racing 750 c.c.
1. Maillard-Brune (M.G.), 1,814 kms. 120.
2. Menet (Amilcar), 1,705 kms. 440.

Racing 1,100 c.c.
1. Chevallier (Chevallier), 1,814 kms. 120.
2. Alexis (A.R.8), 1,730 kms. 520.
3. Violette Morris (V.M.), 1,676 kms. 180.
4. Poulain (Amilcar), 1,642 kms. 740.
5. Delpech (Amilcar), 1,504 kms. 800.

Sports 500 c.c.
1. R. Colin (Colin), 1,153 kms. 680.

Sports 1,100 c.c.
1. Lemaître (E.H.P.), 1,801 kms. 580.
2. Poiré (Amilcar), 1,479 kms. 720.

Austin Records at Montlhéry.

The Yacco Oil Company are renowned in France for their long-distance record runs, and last month they chose for the first time a British car for the purpose. This was a 3,400 c.c. Austin, and it was driven in turn by César Marchand, Fortin, de Présale and Bodécot. Although rain fell for a good part of the time, the Austin maintained a steady average speed of 84 m.p.h., for 12 days and nights, the car running with the utmost regularity, and never giving a hint of trouble. At the end of that period the car had taken 10 world's records and 22 Class C records, as follow :—

World's Records and Class C Records.

20,000 miles, 83.67 m.p.h. (Voisin, 82.74 m.p.h.).
25,000 miles, 84.14 m.p.h. (Citroen, 77.66 m.p.h.).
30,000 kms., 84.37 m.p.h. (Voisin, 82.97 m.p.h.).
35,000 kms., 83.86 m.p.h. (Citroen, 77.42 m.p.h.).
40,000 kms., 84.13 m.p.h. (Citroen, 77.65 m.p.h.).
8 days, 84.11 m.p.h. (Voisin, 83.65 m.p.h.).
9 days, 84.32 m.p.h. (Voisin, 82.83 m.p.h.).
10 days, 83.68 m.p.h. (Voisin, 82.76 m.p.h.).
11 days, 83.90 m.p.h. (Citroen, 77,83 m.p.h.).
12 days, 84.07 m.p.h. (Citroen, 77.50 m.p.h.).

Class C Records Only.

10,000 kms. 84.28 m.p.h. (Ford, 77.73 m.p.h.).
10,000 miles, 83.03 m.p.h. (Ford, 78.01 m.p.h.).
15,000 kms., 84.61 m.p.h. (Ford, 78.06 m.p.h.).
15,000 miles, 83.97 m.p.h. (Hotchkiss, 68.91 m.p.h.).
20,000 kms., 83.57 m.p.h. (Ford, 78.08 m.p.h.).
25,000 kms., 84.06 m.p.h. (Hotchkiss, 68.99 m.p.h.).
3 days, 84.24 m.p.h. (Ford, 77.57 m.p.h.).
4 days, 84,58 m.p.h. (Ford, 77.90 m.p.h.).
5 days, 83.00 m.p.h. (Ford, 78.05 m.p.h.).
6 days, 83.48 m.p.h. (Ford, 78.03 m.p.h.).
7 days, 83.87 m.p.h. (Ford, 78.05 m.p.h.).

The Panhard in Great Form.

That wonderful old car, the 8 cylinder sleeve-valve Panhard et Levassor, was in action for a short time at Montlhéry last month, and in the space of six hours collected six world's records and six Class B records.

The drivers were G. E. T. Eyston, famous "recordman," and Dudley Froy, who was making his first official drive in the Panhard. The records taken belonged previously to the Napier-Railton and the Pierce-Arrow. Dunlop tyres and Castrol oil played their effective part in the record run, and the speeds maintained were extraordinary high, as will be seen from the following list of the records :—

World's Records.

200 miles, 128.07 m.p.h. (Napier-Railton, 126.44 m.p.h.)
500 kms., 126.04 m.p.h. (Pierce-Arrow, 124.00 m.p.h.).
3 hours, 126.22 m.p.h. (Napier-Railton, 124.33 m.p.h.).
500 miles, 126.45 m.p.h. (Pierce-Arrow, 124.05 m.p.h.).
1,000 kms., 125.15 m.p.h. (Napier-Railton, 122.82 m.p.h.).
6 hours, 124.82 m.p.h. (Napier-Railton, 123.01 m.p.h.).

The Disastrous Accident at Fontainbleau.

One of those terrible accidents which sometimes occur in motor-racing actually befell during the hill climb at Fontainbleau on May 13th. A good entry had been received, including Marcel, Roumani, Césur, Cazaux and Eric Lora and everything pointed to the meeting being a great success.

Then came the tragedy, Eric Lora (whose real name was Cochin, a naval officer stationed at Marseilles-Marignane), was nearing the finishing line with his 2-litre Bugatti when a dog strayed on to the road. Several spectators tried to attract the attention of the driver, with the result that the latter applied his brakes fiercely. The Bugatti immediately took charge, skidding into the crowd who lined the very verge of the road. Having knocked down 11 people, killing 6 and seriously injuring 5 more, the car came up against a tree. Lora himself died soon after his admission to hospital, and the meeting was immediately abandoned.

Bugatti Victories in G.P. des Frontières.

The Grand Prix des Frontières is organised every year by the A.M.C. de Chimay. It consists of a day's racing for cars and motor-cycles, there being three classes for the former. The length of the lap is 10 km. 870. Last year, it will be remembered, Penn-Hughes finished second in the larger class on a 2.3 litre Alfa-Romeo.

This year the race was run on May 20th, and for some reason failed to attract any first-rank drivers. Here are the full results of the three races :—

1,100 c.c. (Distance 54 miles), 1, Rouleau (Amilcar), 64.73 m.p.h.; 2, des Ormes (Amilcar), 3, Chevallier (Rally).

7,000 c.c. (Distance 105 miles). 1, Sojka (Bugatti), 71,98 m.p.h.; 2, Porter (Bugatti); 3, Borowski (Bugatti).

Unlimited (Distance 105 miles). 1, Conguessi (Bugatti), 73.72 m.p.h.

Varzi Wins the Targa Florio for the Fourth Time.

In spite of the definite announcement that the Targa Florio would not take place this year, the race was actually held on May 20th, as originally arranged. Considering the belated organisation an excellent entry was received, headed by the famous "ace" Achille Varzi, driving one of the Ferrari-owned 3 litre Alfa Romeos.

The present Madonie circuit measures 108 kilometres, the total distance being four laps, or 432 kilometres. On May 20th, drenching rain fell throughout the day, and this had the effect of preventing record speeds being made on the difficult mountain road. In actual fact Varzi's speed was about 10 k.p.h., slower than the record for the race. He led easily from start to finish, being 13 minutes ahead of Barbieri at the end.

Full Result.

1. Varzi (Alfa-Romeo 3,000 c.c.), 69.22 k.p.h., 6h. 14m. 26.8s.
2. Barbieri (Alfa-Romeo 2,600 c.c.), 6h. 27m. 14.2s.
3. Magistri (Alfa-Romeo 1,500 c.c.), 6h. 40m. 2.6s.
4. Balestrero (Alfa-Romeo 2,600 c.c.), 6h. 45m. 43s.
5. Pages (Alfa-Romeo 2,300 c.c.), 6h. 49m. 28s.
6. Ghersi (Alfa-Romeo 2,600 c.c.), 6h. 49m. 32s.
7. Fiorello (Alfa-Romeo 1,750 c.c.), 6h. 54m. 12s.

SHELSLEY WALSH ENTRIES

AN AUSTRIAN TEAM AND THE PICK OF ENGLISH DRIVERS.

LESLIE WILSON, the energetic and popular Secretary of the Midland Automobile Club, has every reason to be satisfied with the programme arranged for Saturday, June 9th. The entry is being confined to 70 cars, all of them capable of climbing the tricky 1,000 yards course in under 60 seconds, while further improvements in the 'vantage points available to the public have been carried out.

E. G. Frankl, the well-known Austrian hill-climb exponent, will be bringing over a team of three cars. He is driving himself a 2.3 litre Bugatti, his brother, Oskar, will be handling a supercharged 500 c.c. D.K.W., with Wiestrow, the third member of the team, on a blown M.G. Midget. Stuck will not be able to bring over the Auto Union car for the forthcoming climb, as it takes place less than a week after the Eifel Race, but has promised to take part in the September event.

In the smaller categories Letts will be driving his blown M.G. Midget, Hall will have his Magnette and Horton is bringing a M.G. Midget, a Magnette and his "Special." Two supercharged Morris Minors are to be driven by Peter Skinner and Miss Barbara Skinner, and Appleton has entered a 1,100 c.c. "Maserati-Riley." R. J. G. Nash has entered the "Spook."

Harker's V.8 1,500 c.c. car now has two M.G. blocks, and S. H. Newsome has resuscitated the Beck Powerplus car to some effect. Davies is again running the straight-eight Delage, while Bolster has now fitted *two* V-twin motor cycle engines to his exciting little car.

Raymond Mays will be driving a 1,500 c.c. E.R.A., and hopes to have the 1,100 c.c. ready in time to compete.

2.3 Bugattis will be driven by Eccles, Bachelier and Fothringham. C. E. C. Martin has entered a 2-litre Alfa, and Major Gardner will be driving a "2.3." Some further Alfa entries are expected. Last and not least, Whitney Straight will be defending his title with one of the 3-litre Maseratis.

The usual prizes and cups will be awarded, with £100 for fastest time of the day.

The most interesting improvement, as far as spectators are concerned, is the filling in to slightly above road level of the deep hollow immediately on the right hand side of the first bend (going up). This has entailed the expenditure of a considerable sum of money by the Club as the outlet from the reservoir has had to be piped and the reservoir enlarged.

There is no doubt that this new 'vantage point (which will be for the use of the general public) is the finest on the Hill, as it gives a view of the cars as they leave the old crossing right round the first bend until they disappear round the second bend. It has been suggested to the B.B.C. that the top commentators hut be moved to this point and the bottom hut moved slightly higher up the hill (still in sight of the start), and a spot has been found that will allow the top commentator to pick up the car where it goes out of the view of the bottom commentator.

The new clearing at the old crossing has now been equipped with seating accommodation for a good number of the general public (no extra charge), and it is hoped next year to put seating accommodation on the new point at the bend, when the new ground will have settled down.

Eight clubs, including the Midland Automobile Club, have signified their intention of having their own tea tents and car parks at the bottom of the hill in the R.A.C. parks.

THE GRAND PRIX OF CASABLANCA

IN all respects the Grand Prix of Casablanca turned out to be a first-class race. There was a splendid entry of the latest cars, a record crowd, and perfect weather. What more could the Automobile Club Morocain desire? As is the way abroad, and in fact anywhere a road race takes place the excitement in the town began many days before May 20th. The drivers arrived one by one, and the arrival of each was the signal for still more talk and discussion as to their chances of success.

A gesture which caused great applause was the opening of the course by the famous airman, Dieudonné Costes and his wife, who drove round the circuit in a closed car. Then the cars were lined up in front of the stands, in the following order:—Lehoux (Alfa Romeo), Chiron (Alfa Romeo); Etancelin (Maserati); Straight and Hamilton (Maseratis); Comotti (Alfa Romeo); Sofietti (Alfa Romeo) and Minozzi (Alfa Romeo); Brunet (Bugatti) and Zanelli (Alfa Romeo); Mlle. Hellé-Nice (Alfa Romeo); Biondetti (Maserati); Sommer (Maserati); Corsi (Maserati), and Menco (Maserati).

The signal to start was given by Charles Faroux, Clerk of the Course, and the 15 cars shot away in massed formation. At the end of the first lap the Ferrari Alfa Romeos were expected to lead, even though they were driving 2.6-litre cars and not the Type B 3-litre cars. Round they came, Chiron leading with Lehoux tucked in behind him. Etancelin was a short distance in the rear, followed by Whitney Straight, Hamilton, Comotti (the third Ferrari driver), Zanelli, Sommer, Brunet, Minozzi, and the rest.

Facts About the Race.

Organised by the A. C. Marocain.
Run on Sunday, May 20th.
Length of lap (new course), 6 km. 370.
Length of race: 382 km. 200.

Previous Winners.

1931 1,500 c.c. Scaron (Amilcar), 124 k.p.h.
Unlimited, Czaikowski (Bugatti), 136 k.p.h.
1932. 1,500 c.c. Veyron (Bugatti), 112 k.p.h.
Unlimited, Lehoux (Bugatti), 125 k.p.h.

On the second lap Brunet came into the pits, but was away again in a moment. His twin-camshaft Bugatti was the only one of its *marque* in the race, and he was therefore, watched with sympathetic interest by many of the spectators.

On the third lap Lehoux pulled in to the pits to adjust his brakes, and by the time he had got going again Etancelin and Hamilton had passed by. He immediately set off in pursuit, and on the sixth lap caught Hamilton to take third place behind Etancelin, Chiron still leading the race comfortably. By the ninth circuit Lehoux had retrieved his position and the Ferrari drivers once more led the field.

So far Hamilton had been making an impressive display, proving himself to be just as fast and skilful as the leading foreign "aces." Then he had tyre trouble, and the brief stop was sufficient to push him back to eighth place. Comotti, the new Ferrari representative, had by this time got into his stride and had crept up to fourth place behind Etancelin. Whitney Straight was driving a cool, unhurried race in fifth position. Mlle. Hellé-Nice retired with the back axle of her 2.3-litre Alfa Romeo damaged, and Menco had already abandoned the race after crashing at the Marabout corner.

At half-distance, then, the order of the cars was as follows:—

1. Chiron (Alfa Romeo), 1h. 26m. 42s.
2. Lehoux (Alfa Romeo), 1h. 27m. 25s.
3. Etancelin (Maserati), 1h. 27m. 27s.
4. Comotti (Alfa Romeo), 1h. 28m. 53s.
5. Straight (Maserati), 1h. 29m. 54s.
6. Minozzi (Alfa Romeo), 1h. 32m.
7. Soffietti (Alfa Romeo).
8. Hamilton (Maserati).
9. Biondetti (Maserati).
10. Zanelli (Alfa Romeo).

Straight clung to his third place for many laps, some 30 seconds astern of Etancelin. Behind him Lehoux had passed Comotti, and was gradually drawing nearer. Chiron was an obvious winner, so the crowd turned their attention to the struggle for second and third places. Three laps before the finish Lehoux managed to catch Straight, and this order was maintained until the finish. As for Chiron, no praise can be too high for his effortless driving, which makes little demands on the car and is therefore free from unnecessary pit stops.

Result.

1. L. Chiron (Alfa Romeo 2,650 c.c.), 2h. 55m. 42.4s., 81.10 m.p.h.
2. P. Etancelin (Maserati 3,000 c.c.), 2h. 56m. 32.6s.
3. M. Lehoux (Alfa Romeo 2,650 c.c.), 2h. 57m. 23.8s.
4. W. Straight (Maserati 3,000 c.c.), 58 laps.
5. Comotti (Alfa Romeo 2,650 c.c.), 58 laps.
6. Minozzi (Alfa Romeo 2,300 c.c.), 57 laps.
7. J. Zanelli (Alfa Romeo 2,300 c.c.).
8. Biondetti (Maserati 3,000 c.c.).
9. Brunet (Bugatti) 2,300 c.c.).

Motor Sport Classified Advertisement Section

HEAD OFFICES:

39, VICTORIA STREET, LONDON, S.W.1

Telephone: VICTORIA 5218

Rates prepaid - 1/- per line (minimum 3 lines).

CLOSING DATE first post on the **23rd** of the month, for publication on the 1st of the following month.

USED SPORTS CARS FOR SALE.

ALFA ROMEO

1928 ALFA-ROMEO 1½-litre 6-cylinder 4-door saloon, recently thoroughly overhauled and in faultless condition, taxed, £195. Apply Box 27, c/o MOTOR SPORT.

1928 1½-litre ALFA-ROMEO drop-head coupé by Young of Bromley, nice condition. Apply Box 28 c/o MOTOR SPORT.

BENTLEY

BENTLEY 1927 Model, Speed 3 litre Red label Gurney Nutting Weyman 4-door Sportsman saloon. Short chassis LT 1582. Twin carb. Privately owned. Accept £150 quick sale. Box 049 c/o MOTOR SPORT.

ANZANI G.N.

DIRT TRACK SPECIAL, 1,496 c.c. S.V. Anzani engine. G.N. chassis specially built for dirt track racing. Car can be seen London. Apply Box HS 66 c/o MOTOR SPORT.

FRAZER NASH

FRAZER NASH Cars, Falcon Works, London Road, Isleworth (Hounslow 3172 have for disposal a number of reconditioned cars.—Full particulars on application.

Speed — Power — Efficiency

"MARTLETT" PISTONS

were fitted in Mr. R. T. Horton's Magnette.

Six new International Class G Records at Speeds exceeding 117 m.p.h.

Brooklands Engineering Co., Ltd., Brooklands Track, Weybridge.

'Phone: Weybridge 489.

HORSTMAN

200 Miles Race Car. Lapped Brooklands 98 m.p.h. Fitted F.W.B., lights, dynamo, mudguards, etc.; 4 speeds. Beautiful condition. Works owned until 4 months ago. £35.—Mills, Edington, near Westbury, Wilts.

LAGONDA

1930 LAGONDA 3-litre Fabric Saloon, finished in brown, with leather upholstery, reconditioned throughout, in excellent order and very fast. £350. Apply, Box 351, c/o MOTOR SPORT.

30/98 VAUXHALL

SECOND-HAND spares for Side Valve and O.H.V. models. Everything in stock. Warburton, 420, Walkden Road, Worsley, Manchester.

MAGNETO and DYNAMO OVERHAULS

21/-—Flat rate magneto overhauls (no extras whatever): 12 months' guarantee, repair while you wait, or exchange. The Johnson Engineering Co., 86, Great Portland St., W.1. Museum 7852.

J. M. SUGG & CO. OFFER

£65 1923 3-litre Short Chassis BENTLEY Sports 2-Seater. Well-base wheels; chassis No. 125. Excellent order.

£60 1926 3-litre SUNBEAM 4-seater Sports. Excellent order; fast. Chassis No. 4011E.

£55 6th Series 14-h.p. LANCIA Open 4-Seater. Rebored, repainted, full all-weather equipment, good tyres. Car No. 14905.

£38 5th Series 14-h.p. LANCIA Sports 2-Seater, Spyder body. Rebored, good tyres and batteries; sound order. Car No. 13236.

£10 or Offer. 1922 Side-valve 30-98 Vauxhall Engine. Rebored; Aerolite pistons.

J. M. SUGG & CO., Motor Engineers, Columb Road, West Kirby, Cheshire.

No Connection With Any Other Firm

S. LEWIS'S

Museum: 4793. *OF* *Museum:* 4793.

Racing, Flying & Motor Clothing Fame

27, Carburton St., LONDON, W.1.

10% Discount to all Club Members and Readers of MOTOR SPORT.

RACING CLOTHING.

White Racing Suits, Best Quality Zip Fronts	27/6, 25/-
White Racing Suits, Zip Front, Lightweight ...	22/6
White Racing Trousers, Zip Front ... ... Waist Measurement Please.	15/6
Unbleached Racing Suits, Zip Front	21/-
Black Racing Suits, Zip Front	27/6
Also in Khaki, Blue, Brown, Fawn	27/6
Also made to any design.	
White Mechanic Suits, Button Front	11/6
Mechanic Suits in Blue, Brown, Khaki	8/6, 9/6, 10/6
White Racing Helmets, perfect fitting	7/6
White Leather Racing Helmets, super quality for Sport Car	8/6, 10/-
Unbleached Helmets, cheap line	4/-
Helmets in all colour leathers	7/6, 8/6

RACING VISORS.

Racing Visors in all colours, to wear with Crash Helmets	7/6
Racing Visors to wear with ordinary Helmet or cap, Green Top	7/6, 8/6
Crash Helmets, Super Quality, Leather Covered in White or any colour	42/-
Crash Helmets, ordinary pattern ... ... Cheaper pattern...	32/- 29/-
Racing Body Belts, all size waists	9/-
Racing Gloves, Nett Back, Chamois Palms ...	5/-
Racing Gloves, Cape Palms, Nett Back ...	8/6
Sponge Rubber, one inch thick, cut to any length required ...	[3/4 square foot.

RACING GOGGLES.

Lewis's New High Speed Racing Goggles, fitted large rubber cups, adjustable nose-piece and ventilator, fitted Triplex lenses ...	34/6
Racing Goggles, rubber cup, fitted safety lenses	21/-
Luxor Racing Goggles, Model 10	50/-
" " " Curved, Model 6 ...	77/6
" " " Small pattern, Model 4	40/-
Racing Goggles, curved celluloid lenses	7/6 pair
Triplex Featherweight	6/6
Large Oval, Triplex lenses	5/6
Small Oval, Triplex lenses	4/9
We have some wonderful new lines of Racing Goggles now in manufacture.	
Waterproof Sleeves in Black or Brown... ...	4/6
Electrically heated Gloves, 12 volt circuit	3/- pair
Gaberdine Slip-on Coats, good quality, oilskin lined	42/6
Double Breasted Trench Coats, oilskin lined ...	45/6

LEATHER COATS.

Leather Coats, Full Chrome	75/-, 85/-
Leather Coats, R.A.F. Pattern	85/-, 95/-
Leather Coats, Double Breasted, Black or Brown	65/-
Ladies Coats in all colours ...	55/-, 65/-, 75/-

We specialise in Combination Suits in any colour or design for Garage or Petrol Pump Stations.

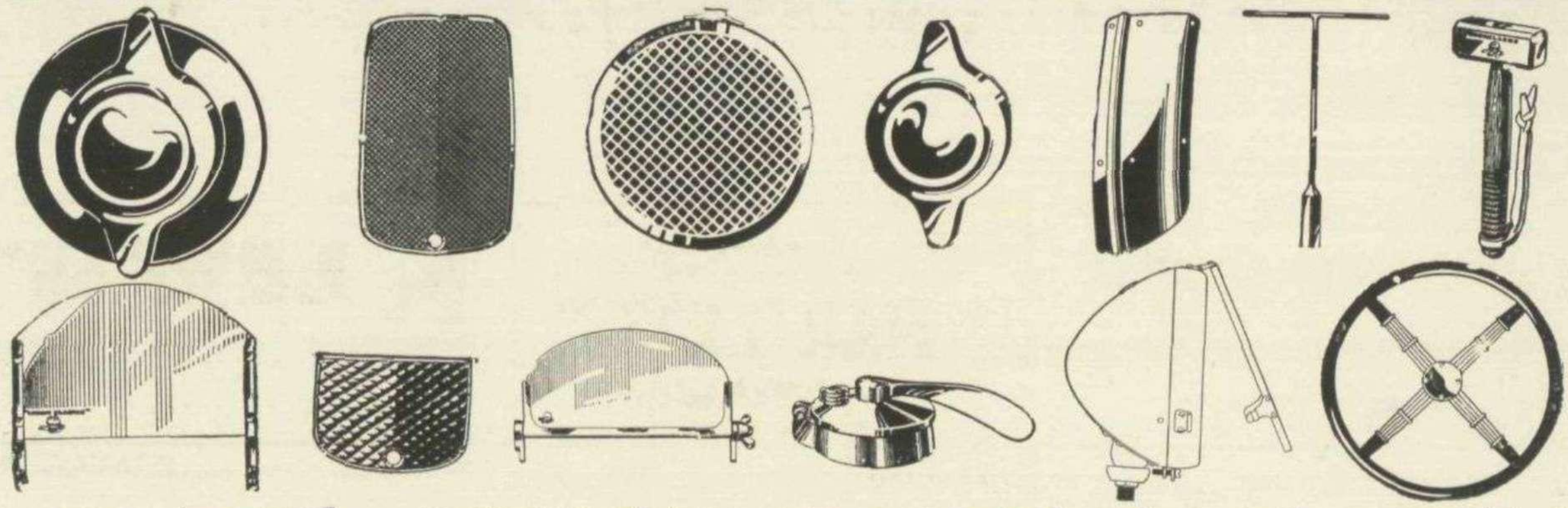
Badges made to any design.

Actual Manufacturers. Trade Supplied.

S. LEWIS, 27, CARBURTON STREET, LONDON, W.1.

FLYING EQUIPMENT OF EVERY DESCRIPTION.

"BROOKLANDS" SPORT EQUIPMENT





"Brooklands" Sport Equipment comprises a complete range of fitments for enhancing the appearance and the handling of your car. Eared Hub Caps, from 21/- set, Radiator Stoneguards, Chromium, from 30/-. Headlamp Grilles, fixed or Hinged, from 19/- pair. Rear Mudguard Protectors, from 16/6 pair. Racing Plug Spanners, 8/6. Copper Hammers for Rudge Whitworth Wheels, 12/6. Detachable Flarescreens, 12/6. Sportmuff—the fabric blanking-off plate, from 10/6. Aero Screens, 17/6. Quick Action Filler Caps and the unique "Brooklands" Fully Flexible Steering Wheel—Standard Equipment on all Britain's leading Sports Cars. Complete Lists on request.

Here

POST TO-DAY

- ONLY 15,000 AVAILABLE
- 20 PAGES
- A COMPLETE RACING RECORD & CALENDAR
- FACTS & FORMULA

We are issuing for 1934 a 20-page Booklet which should prove very useful during the coming Season. It comprises a Calendar, a complete International Fixture List of 170 fixtures, including trials, races, hill climbs, etc., a complete record of 1933 Race Results, giving the first three and average speeds, also provision for entering 1934 results. Information about Brooklands, various records, together with useful information and formula. The supply is strictly limited and immediate application is advisable. Complete coupon and send 3d. in stamps.

Frank Ashby & Sons, Ltd., Stirchley, Birmingham

NAME.....

ADDRESS.....

ENCLOSE 3d. IN STAMPS

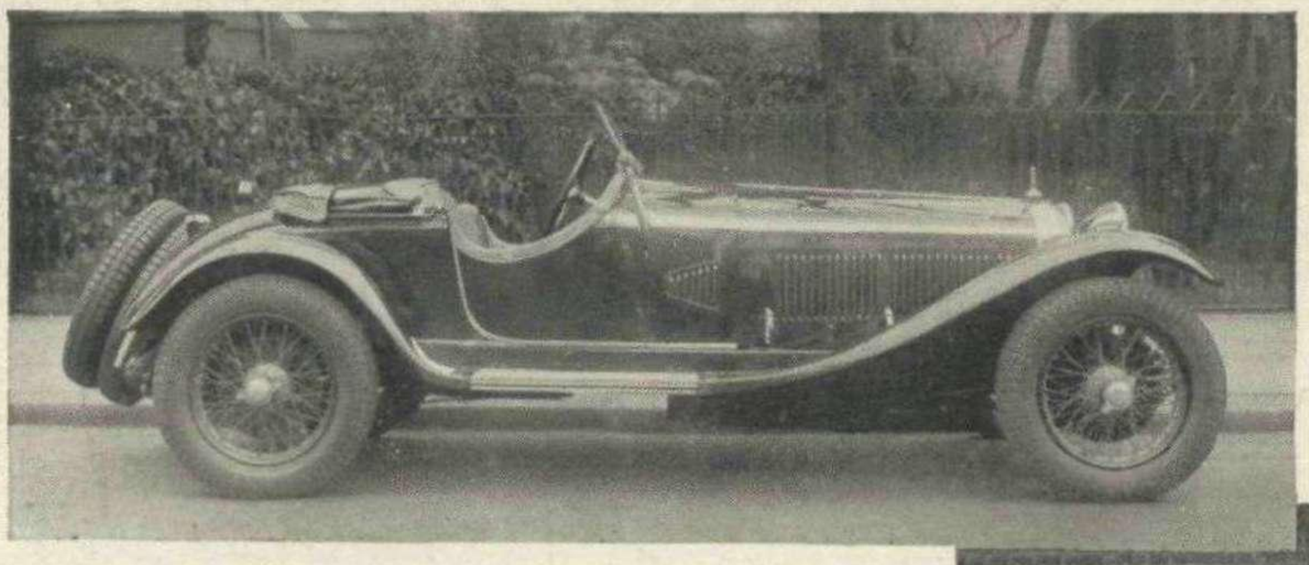
.....

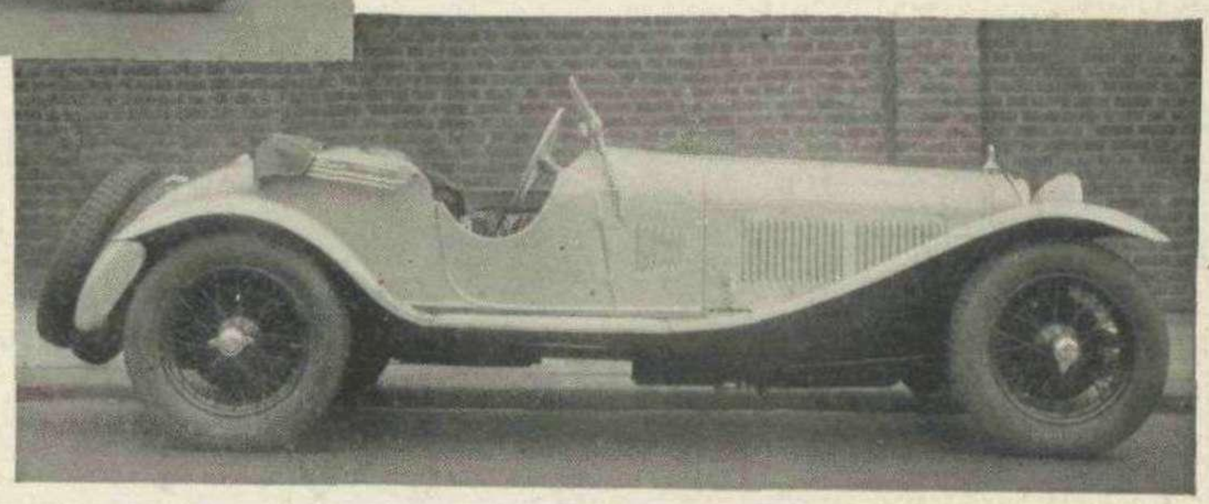
.....

M.S.

INDEX TO ADVERTISERS

	PAGE		PAGE
Acheson, E. G., Ltd.	376	Duller & Street	back cover
Anglo-American Oil Co., Ltd.	347	Dunlop Rubber Co., Ltd.	367
Ashby, F. & Sons, Ltd. ...	inside back cover	Englebert Tyres	344
Aston Martin, Ltd.	338	Ferodo, Ltd.	front cover
Autodrome Speedway Club	337	Frazer Nash Cars	341
Beecholme Motor Co.	371	Houldsworth, J., Ltd.	371
Bellevue Garage & Service Station... ...	363	Price's Motorine	361
Bugatti Owners' Club	337	Robinson, L. & Co., Ltd.	375
Cresta Motor Co.	344	Rolls-Royce, Ltd.	358
Desiderio, C.	337	Smith, S. & Sons, Ltd.	363
„ „	376	Wakefield, C. C. & Co., Ltd.	354





A great opportunity!

Alfa Romeo

ALFA-ROMEO MILANO

SPECIAL OFFER OF 16 H.P. Super-Charged Gran Sport Models

We have just brought over a selection of these cars from Italy, and are offering them at especially favourable prices.

No risk. Every model has been Reconditioned at the Milan Works

of Alfa Romeo. Genuine Manufacturers' dates. Each model capable of over 100 miles per hour. In perfect running order. As good as New. Take advantage of the opportunity now. Phone or write for a Demonstration Run.

STREET & DULLER

47, WEST END LANE, N.W.6

Tel.: Maida Vale 4977

Printed by WIGHTMAN & CO., LTD., Regency Street, London, S.W.1, and Published by the Proprietors, MOTOR SPORT (1929) LTD., 39, Victoria Street, London, S.W.1. Agents for Australasia: GORDON & GOTCH (Australasia), LTD. Copies obtainable and subscriptions received by W. H. SMITH & SON, 248, Rue de Rivoli, Paris; and W. H. SMITH & SON, 78, Rue du Marché-aux-Herbes, Brusselles, Belgium.